



State of Utah  
Request for Proposal  
State Cooperative Contract

Legal Company Name (include d/b/a if applicable) <u>Onix Networking Corp.</u>		Federal Tax Identification Number <u>34-1729033</u>		State of Utah Sales Tax ID Number <u>                    </u>	
Ordering Address <u>26931 Detroit Rd.</u>		City <u>Westlake</u>		State <u>Oh</u>	Zip Code <u>44145</u>
Remittance Address (if different from ordering address) <u>                                    </u>		City <u>                    </u>		State <u>            </u>	Zip Code <u>            </u>
Type <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Proprietorship <input type="checkbox"/> Government			Company Contact Person <u>Tom Cooper</u>		
Telephone Number (include area code) <u>614-389-3332</u>	Fax Number (include area code) <u>614-453-8824</u>	Email Address <u>tomcooper@onixnet.com</u>			
Discount Terms (for bid purposes, bid discounts less than 30 days will not be considered) <u>N/A</u>		Days Required for Delivery After Receipt of Order (see attached for any required minimums) <u>14 days</u>			
Brand/Trade Name <u>Google</u>		Price Guarantee Period (see attached specifications for any required minimums) <u>90 days</u>			
Minimum Order <u>N/A</u>		Company's Internet Web Address <u>www.onixnet.com</u>			
The undersigned certifies that the goods or services offered are produced, mined, grown, manufactured, or performed in Utah. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> . If no, enter where produced, etc. <u>N/A</u>					
Offeror's Authorized Representative's Signature <u>[Signature]</u>			Print or type name and title <u>Tom Cooper, COO</u>		Date <u>11/12/11</u>
State of Utah Division of Purchasing Approval <u>                                    </u>  Kent Beers, Director			Date <u>                    </u>		Contract Number <u>                    </u>

Note: When approved and signed by the State Director of Purchasing, this document becomes the contract.



January 12, 2011

State of Utah Division of Purchasing  
3150 State Office Building, Capitol Hill  
Salt Lake City, Utah 84114

Subject: Response to RFP (#PR11059) due 18 January 2011 at 1:00 P.M. (MST)

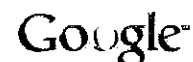
Onix Networking Corporation is very pleased to submit this response to the State of Utah's RFP number PR11059 titled, "Utah Hosted Email, Communication and Collaboration Services." Our offer is valid for 90 days from the date of the proposal opening and contains all requested terms, pricing, and technical details. We are proposing Google Apps, Google Message Discovery, Nexic Journaling Migration, Google Message Encryption and our services. After an extensive review of the contract requirements, we agree that this technical solution fulfills and in some cases exceeds your needs. We fully accept all of the terms, conditions, and provisions that are included in the solicitation and addendum and we understand that the contractor shall only tender for acceptance those items that conform to the requirements of this contract.

Onix Networking is a small business located in Westlake, Ohio. Since 1992, we have been a trusted information technology supplier to the federal, state, and local government. Our dedicated team of professionals services the government's specialized needs and takes great pride in helping agencies achieve their strategic IT objectives. We partner with IT industry leaders and offer extensive expertise in the following core competencies:

- IT Security
- Information Access and Analysis
- Networking Solutions
- Enterprise Geospatial and Search solutions

Onix Networking has been a Google Enterprise Partner since 2002. We were originally the sole federal partner with a GSA schedule for Google from 2002 until 2008. In 2008, Google formally created a Channel Program given the volume, and added additional partners. Onix Networking has built a business around Google Enterprise Solutions that is unmatched in the market. We have the depth of knowledge, resources and relationships to help every one of our Google clients succeed in delivering Google Enterprise solutions to their users. As demonstrated by our satisfied and repeat clients, Onix Networking is able to provide the highest quality and value products and services.

Effective July 1, 2010, Onix has merged with Salvair LLC. Salvair is a top-tier Google partner specializing in helping enterprise-level companies evaluate and implement Google Apps and Postini. Salvair's CEO, Tony Bianco, has participated in some of the largest and most successful Google Apps implementations to date, including DC Government (38,000 users) and City of Los Angeles (at the outset of the engagement). Tony has led implementations of up to 100,000 users, and has participated in implementations at name brand companies like Motorola, Fairchild Semiconductor, Genentech, JohnsonDiversey, MeadWestvaco, RR



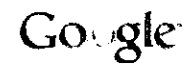
Donnelley and many others. Salvair brings extensive Google Apps experience to Onix. Both Onix and Salvair are members of Google's Partner Advisory Board since its inception in January 2010, which denotes the key relationship each partner plays with Google, and the combined strength of Onix and Salvair.

Onix Networking is proud to partner with Nexic, a proven leader in the Groupwise industry, for this opportunity. Nexic has over 18 years of experience developing software solutions, with 16 years of experience developing specifically for the various different GroupWise API's. Most of their developers worked for Novell with GroupWise at one time or another and a few helped design the GroupWise APIs. Nexic has been creating export and email retention solutions for GroupWise for over 10 years, well before any governing body started requiring email to be saved. Nexic Journaling is the result of the many years of experience in working closely with Novell and GroupWise. Nexic agrees to complete the duties and tasks as outlined in the Statement of Work attached to this response.

It is Onix Networking and Nexic's goal to provide the State of Utah with access to a technically advanced product and the highest level of services that facilitate meeting the stated contract goals. Some examples of how we can help meet those goals:

- **Advanced Technology:** By only utilizing best of breed technology and staying abreast of industry advancements and standards, Onix Networking only employs solutions that meet and exceed education standards and requirements.
- **Responsiveness:** Quickly and efficiently provide solutions, services and assistance as required. The heart and soul of any organization is the ability to respond quickly to all client needs: Providing product solutions, integration, installation, training services, and support (problem resolution).
- **Organizational Excellence:** In everything Onix Networking does, we strive to facilitate the idea of "Organizational Excellence". We view ourselves as an extension of, and partner to our clients and will conduct ourselves accordingly.

The State's strategic goals are what drive advancement and development which will drive us as well. It is our goal to provide the best quality service and technology to meet these goals in the most effective manner possible.



If you have any questions regarding this response, please feel free to contact me at tomcooper@onixnet.com or 800-664-9638. Thank you for your time, consideration, and the opportunity to respond.

Sincerely,

A handwritten signature in black ink, appearing to be "Tom Cooper".

Tom Cooper  
COO, Onix Networking Corp.

A handwritten signature in black ink, appearing to be "Jeff Stratford".

Jeff Stratford  
CEO, Nexic, Inc.

## Table of Contents

Tab I- Executive Summary .....	2
Tab II- Required Business Qualifications.....	5
Tab III- Technical Requirements .....	7
Tab IV- Project Plan .....	89
Tab V- References, Experience and Resumes.....	110
Tab VI- Business Cost Analysis .....	118
Tab VII- Cost Summaries and Professional Services .....	119
Tab VIII- Exceptions .....	124
Tab IX- Confidential Information.....	126

## Attachments

- A. Onix Customer Agreement and Google Terms of Service
- B. Nexic Statement of Work
- C. Resumes
- D. Project Timeline



## Tab I- Executive Summary

After an extensive review of the solicitation, Onix Networking proposes Google Apps, Google Message Discovery, Nexic Journaling Migration, Google Message Encryption and our services. We feel we have the total solution to deliver on your mandatory requirements, and that we can surpass these requirements to bring even more capabilities to your messaging and collaboration infrastructure. We agree to all of the terms and conditions outlined in the solicitation, and we have a complete understanding of the scope of work, operating system and network structure of the State of Utah. We understand that the state intends to enter into a five year agreement (with renewal options up to 5 years), and we are capable of providing the appropriate resources, services, and support to ensure the program is successful.

Section 1.0 of the RFP states, "Email services have been identified as an opportunity to realize cost savings and add additional service capabilities for State Employees. Email services are changing rapidly to an ecosystem of communication options and rich collaboration and sharing environments." Google Apps mirrors your objective precisely, as it is a consolidated group of components which are integrated for communication and collaboration across a broad spectrum of users. Google Apps messaging tools include integrated email, calendar and instant messaging solutions that help users communicate and stay connected, wherever and whenever they work. Google Apps enable secure, real-time collaboration among work groups of all sizes with hosted documents – word processing, spreadsheets, and presentations – web-based video access, and easy web site-building tools. These web-based services can be securely accessed from any browser, work on mobile devices like BlackBerry and iPhone, and integrate with other popular email systems like Microsoft Outlook, Apple Mail, and more. What's more, Google Apps' SAML-based Single Sign-On (SSO) capability integrates seamlessly with existing enterprise security and authentication services. Google Apps deliver productivity and reduce IT workload with a hosted, 99.9% uptime solution that gets teams working together fast.

Google Message Discovery, powered by Postini, is a secure, hosted email service that solves this problem for enterprises looking to cost-effectively protect and access archived email data. Google Message Discovery enables you to:

- Create a centralized and searchable email repository for your organization
- Quickly search across the archive to collect email for legal discovery
- Secure your email from spam, viruses, and other threats
- Manage email retention without expensive investment in storage capacity

Nexic Journaling uses low-level native GroupWise programming interfaces to search for messages within GroupWise. It then sends a copy of the message and associated file attachments via the SMTP protocol (using SSL/TLS encryption) to a Google Message Discovery server. This solution will be used to migrate the State's historic archives to Google Message Discovery. Google Message Encryption service, powered by Postini, provides on-demand message encryption for your organization to securely communicate with business partners and customers according to security policy or on an "as needed" basis. Without the complexity and costs associated with legacy on-premises encryption technologies, Google Message Encryption service makes encrypting email messages easy and affordable. The policy-based solution enables your organization to send encrypted email to any recipient.



Onix should take a moment here to explain to the State of Utah how the Google reseller program works, because it ties into efficiency of scale you require, and will show how Onix delivers on the core functionality of the Google platform.

Google has a fairly open reseller program, meaning anyone can register and try to gain approval from Google to become a reseller, and register specific user accounts as consideration of expertise in support of Google Apps. But it takes a different sort of company to become an Authorized Google Apps Reseller, invited to the initial Google Partner Advisory Board meetings, and who has extensive resources behind enterprise-wide (>3,000 employees) deployments. So while many resellers of Google Apps exist, only a small set of partners have attended the initial partner advisory board meetings, and have the critical mass to support large customer deployments. Onix has been a Google partner since 2002, and is a leader in the Federal Government sales program with Google. Both Onix and Salvair were formative members of the Google Partner Advisory Board, and focus on enterprise-class customer deployments on a daily basis. Our references, included for your contact, show that we have deployed sizable implementations at name-brand companies, and that we have managed end-to-end deployments from a technical to an organizational scope. Some resellers of Google Apps are proficient at the technical set up and configuration of a domain, yet lack true enterprise-class experience in managing communications planning, change management and training for different groups within an organization. The latter tasks prove to be the linchpin of a successful implementation, and Onix excels in each area, with a proven track record of success. As you speak to customer references we hope you will observe that Onix has delivered across the spectrum of the corporate landscape, from technical work to communications and change management, to end-user, IT, Helpdesk, Executive Administrator and Executive training. Onix provides State of Utah with a track record of successful customer deployments and key relationships at Google, along with inclusion in key panels and groups within Google.

Google configured the reseller program so that organizations like State of Utah could license Google Apps user licenses from resellers at the same cost, or even at a lower cost, as a direct license from Google. Google counts on key resellers like Onix to provide consultation and customer support services which it does not offer in the market. This leads Google to focus on building extremely efficient and reliable technology platforms for its user base, while its key partner base can then develop delivery mechanisms to get customers from their source infrastructure to Google Apps in a streamlined way. State of Utah will benefit from custom-built, scalable hardware solutions at secure Google data centers, combined with top-notch professional services and project management from Onix. You no longer have to worry about hardware licenses, software licenses, version upgrades, outages and other issues associated with on-premise products. Google has one version of Google Apps, and inherent security and scalability to support its 2.4 million corporate customers (and growing).

Onix can also provide you with the solutions you need for GroupWise mail, calendar and contacts migration. Onix has custom developed industry leading solutions specifically for GroupWise/Apps migrations. Our experience with services and our ability to develop off-the-shelf and custom applications for customers has allowed us to address the broad brush of customer requirements.

So, the net-net of the solution is that you have the reliability and infrastructure support of a multi-billion dollar name-brand company like Google, along with the specialized services and support of a reputable Google partner like Onix. You can feel secure using the system knowing that DC Government (led by Salvair) with 37,000 users, City of Los Angeles, and many other large government organizations have moved to Google. And, you may export your data and move to



another solution in an efficient fashion. Google facilitates easy messaging and collaboration in a secure way, yet doesn't lock you into upgrades and messy system maintenance, or require any extreme measures to move to another platform in the future, especially since your RFP references a limited term.

We hope you see the extensive thought put into the Project Plans and implementation information, and that you derive from our customer references that Onix can deliver on every facet of the implementation. We hope also you give appropriate weight to the fact that not every organization has the skills or even the basic structure to provide technical and organizational assistance to ensure that your roll out goes smoothly. The organizational change management, communications, and training pieces are critical to a successful roll out, and we have personnel who have delivered these services to large scale customers.

Please note the financial statements provided in the sealed envelope should be '**PROTECTED**' per our Claim of Business Confidentiality Form appended to each envelope.



## Tab II- Required Business Qualifications

### **3.0 Required Business Qualifications**

All Respondents must organize their responses so the level of compliance with Section 3.0 is clearly identified. Failure to do so may disqualify a Respondent's proposal from later evaluation phases. All of these requirements must be met to proceed to Phase 2 evaluation. Qualifications are acceptable only as clarifications to otherwise compliant statements.

"Supported"- It is to the best of our knowledge that we have organized our response as you required.

### **3.1 General Business Requirements**

(M) Respondents must indicate their acceptance of the State of Utah Standard Terms and Conditions attached to this RFP as Attachment A, and the DTS Standard Terms and Conditions included as Attachment C. Any exceptions to these terms and conditions must be noted. Significant exceptions may constitute grounds for rejecting Respondent proposals.

"Supported"- We accept the State of Utah Standard Terms and Conditions and the DTS Standard Terms and Conditions, however we have listed a few exceptions which can be found in Tab VIII.

### **3.2 Experience**

(M) Respondents must be able to provide reference installations from a minimum of five government or commercial customers for their Hosted Email, Communication and Collaboration services offering. References must include environments and complexity that is similar in scope to the State of Utah. Any proposals from Respondents that cannot meet these requirements will not be considered. The Respondent should provide specific contact information describing their reference installations, which may be verified.

"Supported"- Please refer to section 5.0.2 in our response for all of our references.

### **3.3 Financial Stability**

(M) The infrastructure Respondent vendor must provide audited financial statements to the State and should meet a minimum Dun and Bradstreet (D&B) credit rating of 4A2 or better. Please provide the Respondent's D&B Number and the composite credit rating. The State reserves the right to verify this information. If a branch or wholly owned subsidiary is bidding on this RFP, please provide the D&B Number and score for the parent company that will be financially responsible for performance of the agreement. Prime contractors working on behalf of Respondents must submit financial statements that demonstrate financial stability, and adequate working capital, but do not need to meet 4A2 credit rating requirements.

"Supported"- Please refer to our financial statements included in the sealed envelope for your review. This information should be 'PROTECTED' per our Claim of Business Confidentiality Form attached.

Onix Networking Corporations Dunn & Bradstreet Number is 807896121 and since we are privately held and do not share our fiscal balance sheet, we do not have a D&B credit rating.

### **3.4 Availability**

**(M) The Respondent must propose a Hosted Email, Communication, and Collaboration solution that will deliver availability of 99.9% or greater, inclusive of scheduled downtime required for maintenance and upgrades. Measurement shall be reported on a monthly basis with a cumulative year to date. Extra points will be awarded to respondents that can guarantee 99.99% or greater availability.**

"Supported"- Google's uptime service-level agreement is 99.9% calculated monthly. Penalties are imposed in the form of service credits as follows:

< 99.9% - ≥ 99.0% Monthly Uptime Percentage --> 3 days of service credited

< 99.0% - ≥ 95.0% Monthly Uptime Percentage --> 7 days of service credited

< 95.0% Monthly Uptime Percentage --> 15 days of service credited

The most up-to-date and detailed description of the SLA is available at <http://www.google.com/apps/intl/en/terms/sla.html>

Google does not plan / schedule downtimes on any recurring or regular basis and there will be no more than twelve hours of planned / scheduled downtime per calendar year. Customers would be notified of planned / scheduled downtime at least five days prior to the commencement of such downtime. Since August 2008, Google Apps uptime has been 99.98% with zero minutes of scheduled downtime. All service interruptions and current service availability are published publicly at <http://www.google.com/appsstatus>

### **3.5 Project Management and Implementation Plan**

**A Project Management and Implementation plan is required and must be submitted in accordance with Section 4.0.3 of the Respondent's proposal. Respondents must define supported services available to the State and how the Respondent will accomplish the overall migration from the existing State services to the proposed Respondent services.**

"Supported"- Please refer to Attachment D.

## Tab III- Technical Requirements

### **4.0.1 General Responsibilities**

**4.0.1.1(M) The Respondent must provide the personnel, equipment, tools, test equipment, and expertise to meet the requirements in this RFP.**

"Supported"- Our proposal includes all of the resources required to meet the requirements in this RFP.

**4.0.1.2 (M) The respondent must provide a test and/or proof of concept environment for evaluation by the State that verifies the respondents ability to meet mandatory requirements in section 4.0. This environment must be available within one week of the commencement of the evaluation process.**

"Supported"- Onix can meet this requirement in a several ways. Google provides a way for the State to test out on your primary domain, without affecting any existing processes (e.g. normal mail flow will continue and no MX record changes are required). The State would simply need to validate ownership of the domain name, and testing could begin very quickly, and within the time frame noted in 4.0.1.2 above.

If you are asking if we can make a test domain available, or if Onix has a test domain available, we do have such a domain available today, and can show various functions or features or other things as required. While we do not have a BES or other "enterprise-class" infrastructure on this domain, it is a full Google Apps domain which mirrors a production domain.

**4.0.1.3 (M) The Respondent must propose to install, test, provide all products or services, and warranty the services as specified in this RFP.**

"Supported"- Given the nature of a Software as a Service solution, there is not anything to install per se. We will implement and provision the services and test them to ensure that everything is operating as desired. Onix agrees to fix free of charge or refund payments on any consulting hours which do not meet the agreed upon consulting specifications of the State, and which the State has not accepted as completed. Onix limits the liability of the sum total of these fixes or refunds to 20% of the overall Statement of Work Value.

**4.0.1.4 (M) The Respondent must abide by State of Utah IT policies, standards, procedures and best practices as detailed at the Utah Technical Architecture Wiki at <http://www.utahta.wikispaces.net>.**

"Supported"- We agree to abide by the State of Utah IT policies, standards, procedures, and best practices as detailed on the State's Wiki.

**4.0.1.5 (M) Computer applications and Web sites must be accessible to people with disabilities, and must comply with State accessibility policy and the Americans with Disability Act.**

- Applications acquired or developed must be compliant with the Accessibility and Usability Guidelines referenced in Section 4 of the State

of Utah Web Standards and Guidelines. See  
<http://dts.utah.gov/egovernment/documents/utWebStandards051707AD.pdf>.

- Applications and content delivered through Web browsers must comply with the Internal Web Browser Standard 4300-0002 Update at  
<http://www.utahta.wikispaces.net/file/view/Internal%20Web%20Browser%20Standard%205.25.10.pdf>

"Supported"- Information access is at the core of Google's mission - "to make the world's information universally accessible and useful". That's why in addition to crawling, indexing and ranking billions of websites, images, videos and other content, we also work to make that content available in all languages and in accessible formats.

Google wants to make information available to everyone, and that includes people with disabilities, such as blindness, visual impairment, color deficiency, deafness, hearing loss and limited dexterity. We've found that providing alternative access modes like keyboard shortcuts, captions, high-contrast views and text-to-speech technology helps everyone, not just people with disabilities. For example, keyboard shortcuts help power users get things done more quickly without using a mouse, speech-to-text technology enables people to skim and search audio content, and custom product themes give people more opportunities to personalize.

Key points in the context of email and calendaring:

- Gmail offers a simplified HTML interface that doesn't use AJAX and is easy to navigate with a screen reader.
- Google Calendar offers an ARIA (Accessible Rich Internet Applications) enhanced version with keyboard shortcuts, and supports iCalendar.

For more on Google Apps Accessibility, and Section 508 Voluntary Product Accessibility Templates (VPAT), see <http://www.google.com/accessibility/resources.html>

#### **Additional Resources include:**

##### **Calendar**

- Keyboard and mouse shortcuts: Use combinations of keyboard strokes and mouse clicks to get things done faster or without looking at the screen. This article explains how to perform specific actions like creating new events, switching views and skipping between entries.
- Using Google Calendar with screen readers: Learn how to navigate to the ARIA (Accessible Rich Internet Applications) enhanced version of Google Calendar and use keyboard shortcuts.

##### **Docs**

- Keyboard and mouse shortcuts: This article explains how to perform specific actions in Docs like changing text styles, turning on lists or selecting cells in a table.
- Using Google Docs with a screenreader: Learn how to navigate to the ARIA enhanced version of Google Docs and use keyboard shortcuts.

##### **Gmail**

- Keyboard and mouse shortcuts: This article explains how to perform specific actions in Gmail like skipping between messages, muting conversations and starring emails.

- Accessibility information for Gmail's basic HTML view: Gmail offers a simplified HTML interface that doesn't use AJAX and is easy to navigate with a screen reader. Read this article to learn about the features of Gmail's HTML view.
- Using the basic HTML view with a screen reader: Learn how to navigate Gmail's HTML view with a screen reader.
- Using the standard view with a screen reader: Learn how to navigate Gmail's standard view with a screen reader.
- Gmail Themes: Read this article for tips on how to customize your Gmail theme with personalized color and contrast.

### Spreadsheets

- Keyboard and mouse shortcuts: This article explains how to perform specific actions in Spreadsheets like adding links, navigating between cells and copying.

### Video

- How do I enter captions or subtitles for my videos? Learn how to add captions/subtitles to videos you've uploaded to Google Video.
- Can I get help captioning or subtitling my video? If you need help adding captions or subtitles to your video, check out this help article for a list of resources.

Google Apps and Postini comply with the State's Internal Web Browser Standard 4300-0002.

## 4.0.2 Business Technical Requirements

### 4.0.2.1 EMAIL

#### **4.0.2.1.1 (M) Basic email functionality, including but not limited to email filtering, send, receive, format, and attachment, and the ability to retract email messages within specified respondent system parameters.**

"Supported"- Gmail offers the basic functions such as sending, receiving and formatting your e-mails with rich text features, such as bold, italics and underlining, as well as allowing you to attach any type of file to your e-mail. In addition, Google Apps for Government offers 25 GB of storage per user. Gmail also includes integrated Instant Messaging, as well as voice and video chat all from your browser. Gmail is securely powered by the web, so you can be productive from your desk, on the road, at home and on your mobile phone, even when you're offline.

Gmail supports rule-based email handling via Filters. Gmail's filters allow you to manage the flow of incoming messages. Using filters, you can automatically label, archive, delete, star, or forward your mail, even keep it out of Spam -- all based on a combination of keywords, sender, recipients, and more. Gmail offers the ability to define an unlimited number of rules (filters) for handling mail. Users may define filters which result in actions on incoming or existing email. More detail: <http://mail.google.com/support/bin/answer.py?hl=en&answer=6579>

Google Mail offers a lab feature called "Undo Send" that can be optionally enabled. Once a user sends a message, Undo Send allows the user 5 – 30 seconds to recall the message.

#### **4.0.2.1.2 (M) Ability to search all email and attachments.**

"Supported"- Google Apps allows for full-text searching based upon all components of a message (Sender, recipient, body, subject, attachments, etc...). In addition, Investigators can

retrieve archived data based on content, sender, recipient, and/or other metadata with different archival periods.

#### **4.0.2.1.3 (M) Migrate existing data in and out of the proposed solution.**

"Supported"- There are many tools available for migration - both for an administrator led migration as well as for a self-service model. There are various tools to help this process such as Google Apps Migration for Lotus Notes and Google Apps Migration for Exchange, Google Apps Directory Sync, Novell GroupWise migration, as well as a whole host of other more targeted tools are available.

Should you decide to migrate away from Google at the end of your license term, you should be able to take your data with you if you choose to use external services in conjunction with Google Apps or stop using their services altogether. (Refer to the following sites for more information: <http://www.google.com/support/a/bin/answer.py?hl=en&answer=100458> and <http://www.dataliberation.org/>.) Google has been very proactive and public in ensuring that your data, maintains your data!

#### **4.0.2.1.4 (M) Ability to create user defined email groups and/or personal folders based on search criteria, and the ability to create system/global groups viewable to users and domains.**

"Supported"- Using the integrated Contacts manager in Gmail, users can easily create and manage their own e-mail groups and add the necessary people to them with a few clicks of the mouse.

Gmail allows users to define their own labels (folders). Labels do all the work folders do and more: users can add more than one label per e-mail. Once a user has created a label, he/she can view all the messages with that label by searching, or by clicking the label name along the left side of any Gmail page. You can search for email conversations by labels.

In Google Apps you have two Contacts sections: personal contacts and shared contacts. If you would like each user at your Google Apps domain to have easy access to all other users at your Google Apps domain, you can enable contact sharing. When you enable contact sharing, all users created in the Google Apps domain are shared contacts. The shared contact list is similar to what is commonly referred to as a global address list. Contact sharing does not allow users to share their personal contacts with each other. Personal contact sharing can be achieved through exporting your contacts list which can be imported by other Gmail users or directly into Outlook or similar application. You can also add users who aren't in your domain to the shared contacts list using the Shared Contacts API. With Gmail, email addresses are automatically added to your Contacts list each time you use the Reply, Reply to all, or Forward functions to send messages to addresses not previously stored in your Contacts list.

#### **4.0.2.1.5 (M) Ability to define rules for email handling.**

"Supported"- Gmail supports rule-based email handling via Filters. Gmail's filters allow you to manage the flow of incoming messages. Using filters, you can automatically label, archive, delete, star, or forward your mail, even keep it out of Spam -- all based on a combination of keywords, sender, recipients, and more. Gmail offers the ability to define an unlimited number of

rules (filters) for handling mail. Users may define filters which result in actions on incoming or existing email.

More detail: <http://mail.google.com/support/bin/answer.py?hl=en&answer=6579>

#### **4.0.2.1.6 (M) Ability to retain email (Specify per-user limit, if any).**

"Supported"- Mail Retention allows administrators to automatically delete email at a domain that is older than a given period of time. For instance, due to legal policies, some administrators want to delete all mail older than 120 days. The mail limit is 25GB per user or up to 10 years of email with unlimited storage using the archiving and discovery solution. (We have proposed two different options in our pricing—1 year retention or 10 year retention.)

#### **4.0.2.1.7 (M) Ability for migrated emails to maintain header information including sender, recipient, date/time, cc, bcc, attachments, etc.**

"Supported"- Google Apps offers several tools for email migration. These tools offer a high level of data integrity, preserving header information including sender, recipient, date/time, cc:, bcc, attachments, etc. However, Google's tools do not currently implement Groupwise calendar and contact data migration.

Onix Networking has facilitated several Groupwise data migrations utilizing our custom developed toolkit, and optionally, could be utilized at the State of Utah.

#### **4.0.2.1.8 (M) Ability to send, assign and delegate tasks.**

"Supported"-Tasks are a Gmail feature designed to help you keep track of the things you need to do. You can create lists of items, set due dates and notes, and even add Gmail messages directly to Tasks. At this time, users are unable to send, assign or delegate tasks, however, you have the ability to generate task lists which can then be emailed to other users for consumption (delegation) into their task lists. Additionally, tasks may be overlaid in users' calendars with reminders and due dates.

Google Apps optionally supports 3rd party contextual gadgets which provide teams the ability to send, assign, and delegate tasks directly from a user's email inbox.

#### **4.0.2.1.9 (M) Ability to access email system from any Internet connection (e.g. dialup, ISDN, and Broadband, including wired and wireless connections).**

"Supported"- Google Apps can be accessed securely from any internet connection. All of the Google interfaces are served over standard HTTP and HTTPS, and will work flawlessly behind firewalls and proxy systems. With Google Apps, there is no software to install and can be accessed using most modern web browsers.

For low bandwidth connections or for unsupported browsers, Gmail provides two additional features: Flaky Connection mode and basic HTML.

In Flaky Connection Mode, Gmail runs off the local store in your browser, regardless of connection status. Google recommends using this mode if the connection is intermittent or slow. The user's account will continue to sync in the background when it's able to do so, with no disruption to their ongoing work.

For low bandwidth connections or for unsupported browsers, Gmail offers a Basic HTML View that is compatible with almost any browser or mobile device. If a users signs in to Gmail using a browser that isn't fully supported, they'll automatically be directed to the basic HTML view.

**4.0.2.1.10 (M) Ability to delegate email functionality to another staff member (i.e., proxy assignments, including mail/phone, appointments, reminder notes, tasks, etc.).**

"Supported"- Proxy (or delegate) access is available for both Email and Calendar with Google Apps. Users may delegate access to their Google Apps mail and calendar accounts to another staff member in the organization so they can manage sharing, read, send, and delete messages or calendar appointments on the user's behalf. For example, users can delegate e-mail rights to an admin, or they can set up a small group mailbox.

If someone has granted access to their account to another staff member, the staff member can access it by clicking the down-arrow next to their email address in the upper-left corner. The delegator's email address can be selected from the drop-down menu.

A user may retract proxy (or delegate) privileges at any point.

At this time there is no native delegation of phone, reminder notes or tasks.

**4.0.2.1.11 (M) Ability to print stored information locally.**

"Supported"- For each interface in Google Apps, Google offers an optimized print view devoid of excess graphics, logos and additional text. Printing messages or other data in Google Apps is very easy, and can be done with a few clicks within the browser. All print device interactions are handled by the local computer's printer settings.

**4.0.2.1.12 (M) Ability to define proxy access limitations (e.g., Read Write; Subscribe to Alarms and Appointments, Modify Options, Rules, and Folders), and retract and/or retrieve messages within an established time period within the State email system.**

"Supported"- Proxy (or delegate) access is available for both Email and Calendar with Google Apps.

Email delegation covers read, write and send and also includes contact delegation. Google Calendar also supports delegation, but provides various levels that are natural to calendar use cases. A full delegate can create, read, update, etc any calendar for which they have been granted access. Lesser permissions can also be granted via Calendar sharing, which can provide read access to appointments with either the full details, or with only a "busy" status that obfuscates the appointment details. The ability to retract and/or retrieve e-mails within the e-mail system is not included at this time.

**4.0.2.1.13 (M) Ability to drag and drop files and attachments into email messages.**



"Supported"- You can drag and drop attachments directly into a message when composing a new message. Instead of selecting "Attach a file", simply drag the file into the compose window to attach the file. This advanced functionality is powered by the emerging HTML5 web standard, and as such is only currently available for Chrome, Firefox 3.6+, and Safari. As additional browsers implement the new HTML5 standards, drag and drop attachment support will become available.

You can also insert a calendar invitation directly from the compose window in Gmail. insert the calendar invitation, compose a new message and click on the new link "Insert: Invitation." A small window will then appear that displays your availability as well as that of the people you are emailing as long as you have permission to view their calendars. Click "Insert Invitation" and this adds a preview to your email message. Sending the message adds the event to everyone's calendars.

#### **4.0.2.1.14 (M) Ability to copy or replicate information to desktop or local storage.**

"Supported"- Messages may be moved, copied or stored locally using desktop IMAP, POP and MAPI clients, such as Mozilla Thunderbird or Microsoft Outlook. Gmail supports the ability to automatically copy, move and store messages into Google docs format which is then exportable to Microsoft Word, Open Office, PDF, HTML, RTF and text.

#### **4.0.2.1.15 (M) Ability to auto save draft email messages.**

"Supported"- Don't worry about losing messages as you compose them -- Gmail automatically saves drafts. If you'd like to save a draft manually, just click **Save Now** above the message you're composing, or press **Ctrl+S** when your cursor is in any of the text fields (**Cmd+S** for Macintosh users).

Additionally, Drafts are synchronized amongst mobile devices. It is possible to begin crafting a message on a desktop or laptop, and then finish that email on a mobile device.

#### **4.0.2.1.16 (M) Ability to synchronize email and attachments to mobile devices.**

"Supported"- Google Apps allows users to keep their Email, Calendar and Contacts in sync with Google Sync for your phone (<http://www.google.com/mobile/sync/>). Google Sync is a utility run on mobile devices to synchronize a user's email, calendar and contacts between mobile device(s) and Google Apps.

With Google Sync, your users can view and edit their Google Apps calendars and contacts from mobile device(s), and get alerts for upcoming calendar events. Google Sync is available for all industry standard mobile devices including Android; Blackberry; Apple iPhone, iPad, or iPod Touch; Windows Mobile; Nokia and most other mobile phones.

#### **4.0.2.1.17 (M) Ability to add both personal signatures and notes.**

"Supported"- Personal signatures are supported by Google Apps at a per user level in plain text, rich-text or HTML formats. In proxy (or delegation) access scenarios, multiple signatures can be configured. Additionally, Google Message Security allows administrators to set a standard compliance footer that can be appended to all outgoing e-mails.

**4.0.2.1.18 (M) Ability to schedule or delay the delivery of email messages.**

"Supported"- Email messages can be scheduled to be sent at a specific time through Google Docs integration

**4.0.2.1.19 (M) Spell checking functionality, including automatic spell checking for free form typing.**

"Supported"- Free-form spell checking takes place within most browsers automatically. For browsers that don't support free-form spell checking, the free Google Toolbar is available.

Gmail's automatic spellchecker operates in the same language the user has selected for their interface. If a user composes a message in a language other than their interface language, they can check the spelling of that message, too by clicking the arrow next to 'Check spelling' to select the appropriate language.

**4.0.2.1.20 (M) Describe what metadata is available and describe the users ability to view metadata for a message type.**

"Supported"- Search results are stored with the original metadata (e.g. the original headers, received lines, recipients, date fields, attachment names and file types, etc). When the messages are set aside in saved sets, the entire message content is included so that the messages and their original metadata are easily searched, reviewed and exported by investigators.

**4.0.2.1.21 (M) Ability to post reminder notes and tasks.**

"Supported"- Tasks are a Gmail feature designed to help you keep track of the things you need to do. You can create lists of items, set due dates and notes, and even add Gmail messages directly to Tasks.

**4.0.2.1.22 (M) Ability to sort/filter emails by date, sender, subject, etc.**

"Supported"- You have the ability to sort/filter emails by specific criteria by utilizing the robust search function in the Gmail interface. For example, if you want to view all emails you have received from a given sender, you would search for either that sender's name or their email address in the search field.

**4.0.2.1.23 (M) Ability to limit or restrict access to Statewide or mass mailing distribution lists.**

"Supported"- Administrators control whether or not a statewide distribution list is open or restricted; groups work within the State by default, unless the State chooses to optionally open them to the public.

Google Apps supports fine-grained access control for administrator-managed groups:

- Who can view content: only group members, or anyone in the domain
- Directory listing in the groups directory
- Who can view members: members only, managers only, anyone in the domain

- Who can join: anyone in the domain, people have to be invited, people can request access
- Allow external members: email addresses outside of the domain can be added to the group and receive emails sent to the group
- Who can post messages: members only, managers only, anyone in the domain; optionally, messages from non-members can be held for moderation
- Who can invite new members: managers only, managers and members
- Message moderation: all messages are held for moderation, no moderation - messages are delivered directly, messages from new members are moderated

Google Apps also supports four types of user-managed groups:

- Public: anyone in the domain can join, post messages, view the members list, and read the archives.
- Announcement-Only: only managers can post messages and view the members list, but anyone from the domain can join and read the archives.
- Team: only managers can invite new members, but anyone in the domain can post messages, view the members list, and read the archives. Optionally, managers can also allow anyone on the Internet to post messages.
- Restricted: only managers can invite new members. Only members can post messages, view the members list, and read the archives. Messages to the group do not appear in search results.

#### **4.0.2.1.24 (M) All services must be delivered via secure means (e.g. HTTPS, SSH, TLS, etc.)**

“Supported”- All Google Apps web interfaces utilize HTTPS by default. Additionally IMAP/POP/SMTP connections for users that opt to connect via a third party client are encrypted using TLS.

As an integrated feature of Google Message Security and Google Message Discovery, powered by Postini, Policy-enforced TLS (Transport Layer Security) service offers your organization an affordable, easy-to-implement solution that automatically encrypts email communications between designated organizations. Encryption is seamlessly applied and always enforced to selected email domains, ensuring that the email will be delivered with the required security to be compliant with data privacy regulations.

Google does not provide command line access to any of its services, so SSH does not apply in this case.

#### **4.0.2.1.25 (M) Ability to add folders to organize emails.**

“Supported”- Gmail supports labels, which operate similarly, but have striking advantages over folders:

- A conversation can have more than one label
- Users can only put a message in one folder whereas they can have an unlimited number of labels associated with a folder
- A labeled conversation can be in several locations (Inbox, All Mail, Sent Mail, etc.) at once, making it easier to find later

- Users can search conversations by label

With folders, users have to:

- Remember where they filed a message to retrieve it from a folder
- Can't always do folder-specific searches

Additionally, for a folder-like workflow, users have the ability to drag and drop a message or group of messages to a label in the Gmail interface.

#### **4.0.2.1.26 (DR) Self-administration and provisioning capabilities.**

"Supported"- The Google Apps Control Panel gives administrators the ability to add, delete, manipulate (rename, set passwords, add nicknames, edit group memberships, grant administrator privileges), suspend, delete all user accounts, and manage a wide variety of policy and mail routing settings. Onix Networking has custom developed a tool, Onix Apps Manager, which allows domain administrators to delegation specific administrative functionality to specific groups (e.g. Ability to only reset passwords to a Helpdesk team).

With Google Apps Directory Sync, you can automatically provision users, groups and non-employee contacts based on the user data in your LDAP server, such as Microsoft Active Directory or Lotus Domino. Google Apps Directory Sync connects to your Google Apps directory and adds/deletes user accounts to match your existing organizational schema. The Google Apps Directory Sync configuration wizard guides you through customizing your synchronization and mapping of your LDAP user list to your Google Apps users, nicknames, shared contacts and groups. You can also synchronize rich user profile data like home/work/mobile phone numbers, addresses, job titles and more. To manage your synchronization, you can perform test synchronizations, and configure change limits, notifications, and scheduled synchronizations.

Key benefits:

- Synchronizes your Google Apps user accounts to match user data in your LDAP server.
- Supports sophisticated rules for custom mapping of users, groups, non-employee contacts, rich user profiles, aliases, and exceptions.
- Performs a one-way synchronization.
- Data on your LDAP server is never updated or altered.
- Runs as utility in your server environment.
- No machine outside your perimeter accesses your LDAP directory server data.
- Includes extensive tests and simulations to ensure correct synchronization.
- Includes all necessary components in the installation package.

In addition Google offers email, contacts and calendar migration tools for Microsoft Outlook (<http://tools.google.com/dlpage/outlookmigration>), Exchange or generic IMAP servers ([http://www.google.com/apps/intl/en/business/switch\\_exchange.html](http://www.google.com/apps/intl/en/business/switch_exchange.html)) and Lotus Notes (<http://www.google.com/apps/intl/en/business/notes.html>) to enable easy migration of contacts to Google Apps. Existing contact data, in desktop applications such as Microsoft Outlook® and Lotus Notes, can be migrated to Google Apps using the Google migration tools mentioned earlier as well as using standard import/export formats for other applications. All Google Apps products including Contacts have Application Programming Interfaces (API) which allow for secure Read/Write/Update of data, for custom implementations/needs beyond the existing tools.

Self-administration: users can, subject to policy, administer a large number of email settings including:

- Language
- Rich-text Signatures
- Labels (folders)
- Mail filtering (rules)
- Spam filtering
- Forwarding

Self-provisioning: users can provision their emails, calendar appointments, and contacts from Microsoft Outlook with the free Google Apps Sync for Microsoft Outlook desktop tool.

Onix Networking has custom developed solutions for facilitating server-side data migrations from Groupwise and FirstClass mail systems. Onix Networking has significant experience developing additional custom migration solutions and can develop solutions for additional systems not mentioned here.

#### **4.0.2.1.27 (DR) Ability to set the priority of a message by the sender.**

"Supported"- Priority Inbox can help save you time if you're overwhelmed with the amount of email you get. It attempts to automatically identify your important incoming messages and separates them out from everything else. Gmail uses a variety of signals to prioritize your incoming messages, including who you've emailed and chatted with most and which keywords appear frequently in the messages you opened recently. You can also use filters in Gmail to always or never mark a certain type of message as important. For example, if you want to make sure all messages from a certain sender are marked important, create a filter for messages from that sender, and select **Always mark as important**.

#### **4.0.2.1.28 (DR) Ability to add a "reply requested" tag to an email message, calendar, item or task.**

"Supported"- When using Google Apps Sync for Microsoft Outlook with Gmail the "reply requested" tag is preserved in communications between Outlook clients.

Google strives to be as compliant with RFC mail standards as possible, while supporting non-compliant clients. Since there is no "reply requested" RFC specification, this capability is a function of proprietary systems and is therefore not implemented natively within Google Apps. Implementing such a feature can cause confusion among end users who might assume external recipients see "reply requested" when, in fact, they do not.

#### **4.0.2.1.30 (DR) Ability to provide remote printing to State facilities.**

"Supported"- This is dependent on the printer settings on the user's workstation. Google Apps uses the Print capabilities of the user's web browser.

#### **4.0.2.1.31 (DR) Ability to set up restricted user accounts that are not visible to other domain users, and to send blind copy care of (bcc) to other recipients.**

"Supported"- Restricted user accounts can be set up such that those users' contact details are not visible to other domain users. Further, an administrative group can be set up pointing to one or more accounts without the administrative group being visible to other domain users. In both cases, emails can be bcc'd to other recipients.

For users who are restricted for the purposes of monitoring, Google offers three approaches:

- Google Message Discovery can be deployed for any subset of users thereby allowing e-discovery and review of all messages sent and received by those users
- The Google Apps Audit API allows administrators to set up email "monitors" on specific user accounts such that all messages sent and received by that users are automatically bcc'd to another recipient without that user's knowledge (for example, in the case of an investigation)
- The Google Apps Audit API allows an encrypted copy of a specific user's entire mailbox to be downloaded in the mbox standard format

#### **4.0.2.1.32 (DR) Ability to scan or fax from multifunction devices to email on an enterprise level.**

"Supported"- If your devices support SSL/TLS, as well as SMTP authentication, they can be configured to print using the Gmail SMTP Gateway. If the device does not support it, it may be possible to set up a tunneling proxy on your network, to provide the secure connection, via additional configuration.

#### **4.0.2.1.33 (DR) Ability to selectively produce RSS feeds of emails.**

"Supported"- The Google Apps Mail Inbox can produce an ATOM (Atom Syndication Format) feed, which is similar in nature to RSS as it is XML.

#### **4.0.2.1.34 (DR) Ability to highlight, color code, or categorize emails.**

"Supported"- Users are able to categorize their emails by using the labels feature. Labels do all the work folders do and give you an extra bonus: you can add more than one to a conversation. Once you've created a label, you can view all the messages with that label by searching, or by clicking the label name along the left side of any Gmail page. You can easily create, edit, and delete existing labels. All labels are color coded and these colors can be customized. To 'highlight' an email for later review, users should use the star feature. Stars should be assigned to special conversations or messages, or used as a visual reminder that you need to follow-up on a message or conversation later. To star a message, users simply click the star icon located to the left of the sender's name on a message.

### **4.0.2.2 CONTACT MANAGEMENT**

#### **4.0.2.2.1 (M) Basic contact management functionality, including but not limited to last name, first name, middle initial, department, title, mobile and other phone numbers, fax number, mailing address, email address, business address, contact log, notes, groups, etc.**

"Supported"- Google Apps Contacts has fields for name, title, company/department, multiple addresses (including business), multiple phone contacts, multiple e-mail addresses, website,

birthday, jpeg photo and notes. It also has the ability to add your own custom fields with custom values to cater for any other fields that may be required.

#### **4.0.2.2.2 (M) Ability to synchronize contact and contact group information with standard mobile devices.**

"Supported"- Google Apps allows users to keep their Email, Calendar and Contacts in sync with Google Sync for your phone (<http://www.google.com/mobile/sync/>). Google Sync is a utility run on mobile devices to synchronize a user's email, calendar and contacts between mobile device(s) and Google Apps.

Capabilities include but are not limited to:

- Over-the-air (OTA/Push) Email
- Calendar and Contacts sync
- Support for email attachments

With Google Sync, your users can view and edit their Google Apps calendars and contacts from mobile device(s), and get alerts for upcoming calendar events. Google Sync is available for all industry standard mobile devices including Blackberry, Apple, Windows Mobile, Nokia and most other mobile phones.

#### **4.0.2.2.3 (M) Migrate existing data from the State's current email system in an automated function, without requiring individual users to manually export and import contacts and groups.**

"Supported"- Google supports the migration of current mail, calendar, contact, directory and personal contacts to Google from on premise systems without end user involvement. Google offers the GAMME (Google Apps Migration for Microsoft Exchange), GAMMO (Google Apps Migration for Microsoft Outlook), and the GAMLN (Google Apps Migration for Lotus Notes) tools for server side migration of mail, calendars and contacts. Google's tools do not currently implement a server side migration mechanism for Groupwise contacts.

Onix Networking has custom developed solutions for facilitating server-side data migrations from Groupwise and FirstClass mail systems. Onix Networking has significant experience developing additional custom migration solutions and can develop solutions for additional systems not mentioned here.

#### **4.0.2.2.4 (M) Ability to categorize or group contacts, and email contact groups.**

"Supported"- With Google's contact manager, users may group and categorize contacts easily and then use those groups to send messages. In addition, these groups can be leveraged in a variety of Google environments, including Google Documents and Google Sites.

#### **4.0.2.2.5 (DR) Ability to synchronize contact information with desktop.**

"Supported"- Google Apps Sync for Microsoft Outlook® is a plug-in for Outlook that lets you import your existing data from Microsoft® Exchange (or any other hosted service you use Outlook with) into Google Apps. You can then keep using your familiar Outlook interface to manage your Google Apps mail, calendar, and contacts. Or you can switch to using the Google Apps interface in a web browser.



Google Apps Sync seamlessly synchronizes all your Google Apps mail, calendar events, and contacts between your Google Apps account in the cloud and your Google profile in Outlook, so you can access the same information at any time from either interface. For more information please visit the Google Apps Sync for Microsoft Outlook® Help Center.

You can also quickly import and export your Contacts to Google Apps using standard formats such as vCard and CSV. For custom implementations and third-party applications requiring a more programmatic integration, Google Apps provides the Google Contacts APIs (<http://code.google.com/apis/contacts/>) which can be used to securely integrate Google Contacts with any application or device. Many third-party Google Apps applications provide Contact integration using these APIs.

#### **4.0.2.2.6 (DR) Ability to share contact lists.**

"Supported"- In Google Apps you have two Contacts sections: personal contacts and shared contacts. If you would like each user at your Google Apps domain to have easy access to all other users at your Google Apps domain, you can enable contact sharing. When you enable contact sharing, all users created in the Google Apps domain are shared contacts. The shared contact list is similar to what is commonly referred to as a global address list. Contact sharing does not allow users to share their personal contacts with each other. Personal contact sharing can be achieved through exporting your contacts list which can be imported by other Gmail users or directly into Outlook or similar application. You can also add users who aren't in your domain to the shared contacts list using the Shared Contacts API. With Gmail, email addresses are automatically added to your Contacts list each time you use the Reply, Reply to all, or Forward functions to send messages to addresses not previously stored in your Contacts list.

#### **4.0.2.2.7 (DR) Ability to use contacts to initiate a phone call from a user computer.**

"Supported"- Google Sync for your phone synchronizes your contacts with the phone's contacts application. All of your contacts are integrated with the phone's call functionality, when using the phone's built-in contacts application. You can initiate calls to any synced contact. The steps to actually initiate the call vary based on the phone/device being used.

When using higher-end smart phones (Android, iPhone), phone numbers displayed in applications and in the browser are recognized and can be clicked to initiate phone calls.

In addition, Users can make phone calls directly from their browsers by utilizing GMail. Calling is free to the US and Canada and highly discounted internationally.

### **4.0.2.3 CALENDARING and SCHEDULING**

#### **4.0.2.3.1 (M) Ability of the sender to delete, retract, or modify appointments.**

"Supported"- Appointments are dynamic and may be changed, modified or retracted by the sender. Optionally, the sender may give the attendees the option to perform these same operations.

#### **4.0.2.3.2 (M) Ability to implement both per calendar and per event access**



**controls including levels for no access, free/busy only, full details, and edit.**

"Supported"- Google Calendar has free-busy look up built in. Google Apps domain administrators may set viewing options for both internal to the domain and optionally, external to other domains. The options are: public, private and share free-busy information only. Users may determine how much information to share at the level of an event and also at the level of an entire calendar. Colleagues may schedule based on different levels of visibility into free/busy information. There is also a support for calendar connectors so free/busy information can be displayed from non-Google calendars, like MS Exchange or Lotus Notes.

#### **4.0.2.3.3 (M) Migrate existing calendar data.**

"Supported"- Google offers a variety of free tools to assist customer with migrating from legacy systems to Google Apps for all of the major legacy collaboration platforms: Lotus Notes, Microsoft Exchange, Novell Groupwise and more.

Organizations can migrate email, contacts and calendar data from on-premise and hosted Microsoft Exchange to Google Apps, whether they have just a few users or tens of thousands using Google Apps Migration for Microsoft Exchange. Organizations may also empower end users to perform the migration themselves using Google Apps Migration for Microsoft Outlook which helps them migrate email, contacts and calendar data from Microsoft Outlook profiles and PST files to Google Apps. Organizations can also migrate data from PST files and IMAP servers (Novell GroupWise and Gmail) using this tool.

For Groupwise calendar migrations, Onix Networking has custom developed solutions for facilitating server-side data migrations from Groupwise and FirstClass mail systems. Onix Networking has significant experience developing additional custom migration solutions and can develop solutions for additional systems not mentioned here.

#### **4.0.2.3.4 (M) Calendaring functionality, including but not limited to appointment, notification, task, event, sharing, and ability to schedule recurring appointments.**

"Supported"- Google Calendar is web-based calendar application that enables employees to work together efficiently. Users can easily schedule appointments, share project calendars, publish calendars and access calendars from their mobile devices. Google Calendar also provides the ability to schedule recurring appointments. Google Calendar is integrated into Gmail and interoperable with popular calendar applications. Unlike on-premise calendaring systems, invitations and free-busy time look-up may optionally be shared outside any given domain. Google calendar includes support for multiple personal calendars, integrated maps, sms notifications, embedded Google Docs, group expansion/invite, calendar sharing and publishing, calendar delegation, event delegation. For more information, please see: <http://www.google.com/intl/en/googlecalendar/about.html>.

#### **4.0.2.3.5 (M) Ability to schedule resources, including but not limited to facilities, conference rooms, and equipment, and restrict visibility to specified resources**

"Supported"- Google calendar supports resources for facilities, conference rooms, and equipment. Google Calendar makes it easy for you to share your available resources with the "Auto-accept invitations" feature. You may set a calendar to view only, or edit. Additionally, calendars may be published to the web and embedded in websites or applications. If this

calendar is set to "Auto-accept invitations that do not conflict," your invitation will be declined if there are conflicting events on the calendar (your resource won't be reserved). For more information please visit:

<http://www.google.com/support/calendar/bin/answer.py?answer=143753>

#### **4.0.2.3.6 (M) Ability to manage resources by proxy (e.g., delegate calendar management, set "view only" or "edit" rights, etc.) to another staff member.**

"Supported"- Google Apps supports calendar delegation. Calendar delegation is fully supported allowing the calendar owner to designate to one or more delegates who can create, respond and manage the entire calendar or individual items on behalf of the delegator. Many users find it useful to give an administrative assistant access to their calendars. With Google Apps, delegating calendar scheduling is an easy and useful feature for those wishing to give others on their team access to scheduling events for them. Calendar Delegation allows you to grant another Gmail user access to your calendar, enabling the delegated user to view and edit your calendar data and act as a manager of calendar data. The use case is when an executive employs an administrative assistant to schedule his/her meetings and appointments. To allow the administrative assistant to manage the executive's calendar, the executive specifies the assistant as a delegate for their calendar. In turn, the administrative assistant may be responsible for managing several executives' calendars. For executives, delegating calendaring to an assistant is a time saver. With scheduling in the hands of an administrative assistant, the executive can focus on higher-value tasks. Managing one or more executives' calendars may consume a significant portion of an administrator's time, so it is essential that the assistant be able to easily access and utilize the executives' calendars. Gmail's calendar delegation feature fulfills this requirement.

#### **4.0.2.3.7 (M) Ability to delegate appointments, and view and schedule from "free busy" information.**

"Supported"- Google Calendar offers users the option of changing the visibility of details for individual events, or overriding the default settings. At any point, the owner of an event may choose to make the details public or private (so the event will disclose only free/busy status). In addition to privacy settings for events, the Calendar allows users to make changes to events on their calendar created by other users. These changes are only visible to the user making the changes and any users/resources added to the event. Users also have the ability to email all event attendees directly from event details page and to set their availability during an event, for other event schedulers to see. For example, a user may book commuting time in the Calendar but they want it to show up as available for meetings. The "Show me as" feature allows the user to book their commuting time and show them as still available to other users. Users are able to schedule from "free busy" information.

#### **4.0.2.3.8 (M) Ability to view multiple calendars at same time (both personal and global).**

"Supported"- By default you may view multiple color-coded calendars at once which simultaneously display user, group and/or resource availability. Google calendar features multiple personal calendars as well as multiple global calendars. Global calendars may include any published calendars, including other users' personal calendars. Unlike on-premise calendaring systems, Google calendars are not limited to sharing within a given domain. Rather, administrators can optionally elect to share free-busy information across domains. Google

Calendar also supports multiple different viewing modes as well: day, week, month, year, and custom range.

#### **4.0.2.3.9 (M) Availability of a calendar Application Programming Interface (API).**

"Supported"- In addition to supporting the standard iCal and CalDAV formats, The Google Calendar Data API allows client applications to view and update calendar events in the form of Google Data API XML feeds. Your client application can use the Calendar Data API to create new events, edit or delete existing events and their attendees, and query for events that match particular criteria.

Google Calendar also supports the ability to embed a read-only version of a calendar on any web page through the use of an inline frame.

For more information about the Google Calendar Data API, visit:  
<http://code.google.com/apis/calendar/overview/>

#### **4.0.2.3.10 (M) Ability to synchronize calendars to standard mobile devices with associated event and attendee data.**

"Supported"- Google Sync allows you to sync just your Contacts, Calendar, or Gmail, or any combination of the three. Google Sync also provides robust administrative controls for mobile devices without having to deploy any additional software or manage enterprise mobile services; Google Apps customers can manage their employees' mobile devices right from the Google Apps administration control panel. These controls will enable new administrative policies for employees using Android, iPhones, Windows Mobile devices, and Nokia E series phones including:

- Remotely wipe all data from lost or stolen mobile devices
- Lock idle devices after a period of inactivity
- Require device passwords on each phone
- Set minimum lengths for more secure passwords
- Require passwords to include letters, numbers and punctuation.

#### **4.0.2.3.11 (M) Ability to view or hide appointment details, and full calendar and show non-detailed free-busy schedule as determined by each individual user.**

"Supported"- Google Calendar has free-busy look up built in. Google Apps domain administrators may set viewing options for both internal to the domain and optionally, external to other domains. The options are public, private and share free-busy information only. Users may determine how much information to share at the level of an event and also at the level of an entire calendar. Colleagues may schedule based on different levels of visibility into free/busy information. There is also a support for calendar connectors so free/busy information can be displayed from non-Google calendars. Within your domain, each user can set different access levels to have full control over who has access to event information on their own calendars. Calendar rights include: Edit event and manage rights, Edit event info, See event info, See Free/Busy info.

Google Calendar offers users the option of changing the visibility of details for individual events, or overriding the default settings. At any point, the owner of an event may choose to make the details public or private (so the event will disclose only free/busy status). In addition to privacy

settings for events, the Calendar allows users to make changes to events on their calendar created by other users. These changes are only visible to the user making the changes and any users/resources added to the event. Users also have the ability to email all event attendees directly from event details page and to set their availability during an event, for other event schedulers to see. For example, a user may book commuting time in the Calendar but they want it to show up as available for meetings. The "Show me as" feature allows the user to book their commuting time and show them as still available to other users.

#### **4.0.2.3.12 (M) Ability to print calendars locally in standard formats (such as daily, weekly, monthly, etc.).**

"Supported"- Calendars can be printed in standard formats such as daily, weekly, monthly, 4-day view and an agenda view (which give you a text listing of the events and details). Just like the online interface, printed calendars can reflect events from multiple personal calendars as well as published calendars. The "Custom View" feature supports additional and user-defined formats.

#### **4.0.2.3.13 (M) Ability to do busy searches to find available appointment times.**

"Supported"- Users can search for and see free/busy times for all invitees and they can also overlay multiple calendars to see when people and resources are available, subject to ACL's; this includes group calendars.

The "Find a Time" feature will automatically search for an optimal time based on people, group, and resource calendars. Google Calendar also automatically sends invitations and manages RSVPs. Recurring events such as weekly, monthly, every Monday, Wednesday, and Friday are supported.

#### **4.0.2.3.14 (M) Ability to edit events that have already been posted by the originating user.**

"Supported"- The originating user can change posted events and choose whether to notify other invitees of the change. The originating user can also delegate the ability to modify the event to other invitees.

#### **4.0.2.3.15 (M) Ability to set up multi-user calendars so managers can view team schedules.**

"Supported"- You can create multi-user calendars with Google Calendars. All you need to do is create the team calendar and share it with the select team members.

The team will be able to edit calendars that you've specifically shared with them. Once you've invited the team to share your calendars, select the "Make changes to events" permission from the drop-down menu in the "Share with specific people" section. If you'd like your team to be able to edit the calendars sharing options as well, just select "Make changes AND manage sharing." Users can set granular permission levels including the ability to see all event details, just free/busy, make changes to events, and include more members in the shared calendar. Calendars may also be published to the web and embedded in websites or applications. A range of sharing permission controls help maintain security and privacy.

Additionally, rather than creating a separate calendar, you can overlay all of the team members personal calendars on your own personal calendar to see their schedule availability in accordance with your availability.

#### **4.0.2.3.16 (DR) Ability to have shared user calendars.**

“Supported”- Calendars can be shared organization-wide or with select co-workers. A range of sharing permission controls help maintain security and privacy. Users can set granular permission levels including the ability to see all event details, just free/busy, make changes to events, and include more members in the shared calendar.

Additionally, calendars may be published to the web and embedded in websites or applications.

#### **4.0.2.3.17 (DR) Ability to import/export calendars.**

“Supported”- Google Calendar allows users to import calendars in iCal or CSV formats. Calendars can be exported individually or as a group in iCal format. Calendars can also be accessed via public and private URLs, depending on sharing settings, in XML, iCal and HTML formats. Embedding of calendars on any website is easily done with the Calendar Embeddable Calendar Helper.

Please note that Google Apps domain administrators can control exporting options available to users in their domains.

Google Calendar also offers a selection of public calendars covering popular holidays and more: <http://www.google.com/support/calendar/bin/answer.py?hl=en&answer=37098>.

#### **4.0.2.3.18 (DR) Ability to easily add new attendee to or remove an existing attendee from an existing event.**

“Supported”- Google Calendar gives users easy ability to make any changes needed to existing events including event details or inviting new attendees and resources/ removing attendees and to choose whether to send the invitee a notification. Adding a new user is as simple as typing their email address and clicking Add.

#### **4.0.2.3.19 (DR) Ability to send appointment to an external user that will sync with other email/calendar systems.**

“Supported”- Anyone with an email address can receive invitations from Google Calendar, regardless of whether they use Google Calendar themselves. When guests receive a Google Calendar invitation, they can select their attendance status or click "More event details" to be taken to an event page and check other guests' attendance status and leave comments for the event. If your guest uses a calendar application that supports the iCalendar format, they can use the iCalendar file attached to the invitation to display your event on their own calendar.

In addition, a user can choose to share their whole calendar with an external user, subject to granular permission levels including the ability to see all event details, just free/busy, make changes to events, and include more members in the shared calendar.

#### **4.0.2.3.20 (DR) Ability to produce public calendars.**

"Supported"- When you choose to make your calendar public, all of your events will appear in the public search results of Google Calendar and Google Web Search. Additionally, everyone can view the calendar and its public events by adding it to their calendar list or using your Calendar Address.

If you make your calendar public and select 'Share only my free/busy information (hide details),' your event details won't appear in Google Web Search or Google Calendar search results. Only your free/busy information will be visible to those who access your calendar at its address or add it to their calendar list.

#### **4.0.2.3.21 (DR) Ability to publish calendars to the Web that use imbed codes and enable live calendar updates.**

"Supported"- Calendars may be published to the web and embedded in websites or applications. Calendar embeds are driven via standard HTML and Javascript and automatically update on all event changes.

#### **4.0.2.3.22 (DR) Ability to manage priority of event.**

"Supported"- Color coded calendars can be used to set priorities. Users can associate priority icons with events, as well as create tasks with due dates. Users can also set future recurring events to be grayed out to emphasize the priority of one-time events.

#### **4.0.2.3.23 (DR) Ability to categorize events.**

"Supported"- The Calendar enables users to color code individual calendars to allow easy identification of particular calendar events. Users can associate category icons with events, as well as associate events with a particular calendar (e.g. the legislature calendar): calendars for specific categories of events are displayed in the user's aggregate calendar in a distinctive color, and can be hidden as needed. Users can also set future recurring events to be grayed out to emphasize the priority of one-time events.

#### **4.0.2.3.24 (DR) Maps integration, automatic display of meeting location based on street address.**

"Supported"- When you enter a location for your events, you'll see a 'map' link appear to the right of the 'Where' field after saving. Click the 'map' link to see a map of the location (via Google Maps).

### **4.0.2.4 e-DISCOVERY**

#### **4.0.2.4.1 (M) Ability to search based on subject, content, sender and/or recipient, date range, metadata or attachments.**

"Supported"- Google Message Discovery (GMD) includes the following search panels into which administrators can enter criteria to retrieve archived messages:

- Email Search panel: provides fields that let administrators enter criteria to find archived email messages by sender, recipient, "has attachment", body, data range search, match all or any included or excluded word combination.

- Boolean Search panel: lets administrators enter their own query strings, using the Apache Lucene query syntax. This syntax supports Boolean operators, wildcards, fuzzy matches, and proximity matches, allowing users to create more-complex or targeted search queries.

Administrators can set up investigations to save and organize their search criteria and results, so they don't have to redo them later on. Searches may be span multiple inboxes or be restricted to a single sender or recipient.

Google also provides an audit API at no additional charge. The Google Apps Audit API allows Google Apps administrators to audit a user's email, email drafts, and archived chats. In addition, a domain administrator can retrieve account login information and download a user's mailbox.

#### **4.0.2.4.2 (M) Ability to place litigation holds on a specified email address.**

"Supported"- Archive administrators (IT/HR/Legal) can place a hold on an email account. A hold prevents the messages from being removed from the archive.

There are three types of holds which administrators can implement:

- Past messages: All messages in the archive for that user up to and including the date they set the hold.
- Future messages: All messages in the archive for that user going forward from the date they set the hold.
- All messages: All messages in the archive for that user.

When an administrator sets a hold on a user's messages, that includes any message in which that user's address is included in the From, To, Cc, or Bcc field.

#### **4.0.2.4.3 (M) Ability to verify authenticity, reliability, and integrity of email messages.**

"Supported"- Mail is stored separately in an immutable archive that is protected using a multi-layer security strategy that combines advanced technologies, industry-standard policies, and best practices, Google/Postini maintains the availability, integrity, and confidentiality of its systems and its clients' messages.

Message Archiving processes your organization's electronic messages in geographically-distributed primary and secondary (backup) data centers. Each data center is located in a physically secured facility with SAS-70 certification, is serviced by a Tier-1 or better network provider, and contains multiple layers of redundancy for network connectivity and power. During the processing of a message, indexing servers create an index for the message, and then store the index on multiple devices. When the message processing has finished, the message is then written to at least two separate geographical locations.

Google/Postini's multi-layer security strategy is comprised of seven components: privacy and data integrity, and organizational, physical, network, application, host, and operational security.

As part of this security strategy, Google/Postini regularly undergoes extensive third-party and self-assessment audits of its security measures, to verify its operation integrity and ensure that it protects the privacy of its customers' data.

To verify that its security strategy maintains operation integrity and that it follows best practices for security, Google/Postini has implemented a comprehensive audit and verification program. This program includes:

- Annual audits of privacy, security, and availability from independent auditing organizations
- Customer audits as requested
- Quarterly internal audits
- Quarterly vulnerability reports
- Compliance with any additional, country-specific security requirements

#### **4.0.2.4.4 (M) Ability to capture and preserve/store email message threads, including tracking email by sender and receiver, date, and record series.**

“Supported”- Search results are stored with the original metadata (e.g. the original headers, received lines, recipients, date fields, attachment names and file types, etc). When the messages are set aside in saved sets, the entire message content is included so that the messages and their original metadata are easily searched, reviewed and exported by investigators.

Message Archiving automatically sets the retention period for all messages in the archive based on the defined policy. Messages are preserved and may be tracked by sender, receiver and record series. Additionally, messages cannot be deleted from the archive until their retention periods expire.

Administrators can place a hold on the messages in saved search results. For example, if an administrator is conducting an investigation and wants to ensure that the retrieved messages are not deleted, they can select an option to place the results on hold.

Administrators can set the following hold options for messages in saved search results:

- Not on hold: available to purge from the archive according to their original retention periods
- Hold indefinitely: held indefinitely in the archive
- Hold until specific date: held in the archive until the specified date

#### **4.0.2.4.5 (M) Ability for multiple mailbox search capability.**

“Supported”- Client-side administrators may retrieve all emails for multiple mailboxes that contain a specified term in any specified field(s) - full text search, keywords, metadata fields, filename or part filename.

Client-side administrators can create complex keyword search queries using Boolean logic and other advanced options such wildcard, proximity, and fuzzy-match searches. Boolean search fields include: sender, recipient, bcc, meta, subject, header, content, attachment, file attachment.

#### **4.0.2.4.6 (DR) Automated rule capability for archiving specified users per state policy, the Government Records Access and Management Act (GRAMA) and Public Records Management Act requirements.**



"Supported"- The administrator sets up Message Archiving to archive the email messages for all users or only specific users for periods ranging up to 120 months. Message Archiving captures email messages that users receive from, and send to, others outside the organization's network. Additionally, administrators can place a hold on specified user(s). Holds can be placed on all messages, all past messages from the date of the hold or all messages in the future from the date of the hold. Additionally, retention policies are associated to an Organization with one or more users being assigned to an organization. There is no limit to how many organizations you may create. The flexibility to set retention periods on a per-organization basis allows you to tailor message retention to the needs of various user groups.

#### **4.0.2.4.7 (DR) Ability to store search results with any metadata.**

"Supported"- Search results are stored with the original metadata (e.g. the original headers, received lines, recipients, date fields, attachment names and file types, etc). When the messages are set aside in saved sets, the entire message content is included so that the messages and their original metadata are easily searched, reviewed and exported by investigators.

#### **4.0.2.4.8 (DR) Ability to add and delete from search results to create an e-Discovery set.**

"Supported"- Search results can be refined by adjusting queries (including the full access to the Lucene query language) in order to create sets of results. By using customized queries, investigators can structure the result set to boost relevance of certain key terms or stakeholders, sort by key terms or proximity to key terms, etc.

The Google Message Discovery service allows administrators to:

- Add to the search results by finding messages with related subjects or messages in a set of exchanges between specific users
- Remove one or more messages from a set of saved search results

#### **4.0.2.4.10 (DR) Specify the actions required if a government agency requests access to State email.**

"Supported"- Google follows standard legal processes in responding to third party requests for user information. Information can only be obtained by third parties through legal processes such as search warrants, court orders, subpoenas, through a statutory exemption, or through user consent. Upon receipt of a request for information disclosure, Google's Legal team reviews the request for compliance with applicable law. If the request is legally valid, it is Google's policy to notify the individual user or organization whose information is being requested except in an emergency or where prohibited by law.

#### **4.0.2.4.11 (DR) Clarify the ability to maintain the state's attorney privilege, including the ability to establish protection for documents protected by attorney client privilege and work product privilege.**

"Supported"- Please note that Google is not allowed to provide legal advice and that this does not constitute legal advice.



Gmail and Google Docs allow existing procedures for marking attorney-client privilege or attorney work product to be followed. Further, with Google Docs (documents, spreadsheets, presentations, drawings and files) the accessibility of any item can be set such that only the individuals involved have access to that item.

**4.0.2.4.12 (DR) Ability to associate Government Records Access and Management Act (GRAMA) and Public Records Management Act requirements, including the ability to associate email with specified records series, legal retention periods, and records classifications.**

"Supported"- The administrator sets up Message Archiving to archive the email messages for all users or only specific users. Message Archiving captures email messages that users receive from, and send to, others outside the organization's network. Additionally, administrators can place a hold on specified user(s). Holds can be place on all messages, all past messages from the date of the hold or all messages in the future from the date of the hold.

**4.0.2.4.13 (DR) Specify and explain the ability to meet geographic legal requirements for user privacy or disclosure or preservation.**

"Supported"- Google recognizes that privacy is important. This Privacy Policy applies to all of the products, services and websites offered by Google Inc. or its subsidiaries or affiliated companies except DoubleClick (DoubleClick Privacy Policy) and Postini (Postini Privacy Policy); collectively, Google's services. In addition, where more detailed information is needed to explain our privacy practices, we post supplementary privacy notices to describe how particular services process personal information. These notices can be found in the Google Privacy Center. Google adheres to the US Safe Harbor Privacy Principles of Notice, Choice, Onward Transfer, Security, Data Integrity, Access and Enforcement, and is registered with the U.S. Department of Commerce's Safe Harbor Program. Full details here: <http://www.google.com/privacypolicy.html>

Additionally, Google has the ability to restrict the location of mail and calendar data to data centers within the United States.

Administrators can define email privacy, disclosure and preservation policies by geography by assigning each geography to an organization with unique policies. Organizational policies include the specific services available, filter settings, and administrators.

Google Apps is the first suite of cloud computing applications to receive Federal Information Security Management Act (FISMA) certification from the U.S. government. With this federal government certification of our security controls, government agencies can use our cloud services with confidence.

**4.0.2.5 ARCHIVE, BACKUP and DISASTER RECOVERY**

**4.0.2.5.1 (M) Ability to recover and restore email messages/contacts/calendars for all users within 4 business hours in the event of a severe outage. Describe your Recovery Policy Objective (RPO) and Recovery Time Objective (RTO).**

"Supported"- For Google Apps, our RPO design target is zero, and our RTO design target is instant failover. We do this through live or synchronous replication: every action you take in Gmail is simultaneously replicated in two data centers at once, so that if one data center fails,



we nearly instantly transfer your data over to the other one that's also been reflecting your actions. Our goal is not to lose any data when it's transferred from one data center to another, and to transfer your data so quickly that you don't even know a data center experienced an interruption. Of course, no backup solution from us or anyone else is absolutely perfect, but we've invested a lot of effort to help make it second to none. More detail available at <http://googleenterprise.blogspot.com/2010/03/disaster-recovery-by-google.html>

And it's not just to preserve your Gmail accounts. You get the same level of data replication for all the other major applications in the Apps suite: Google Calendar, Google Docs, and Google Sites.

#### **4.0.2.5.2 (M) Ability to restore archived email data to "live" status.**

"Supported"- Using the personal archive feature, archived messages can be delivered from the archive to a user's inbox so that it can be restored to "live" status.

#### **4.0.2.5.3 (M) Multiple redundant backups of email messages.**

"Supported"- Google Message Discovery (GMD) keeps four copies of archived email: two at the primary data center and two at the "hot" standby data center. Each of the GMD's primary data centers has a matching secondary, or continuation, data center that automatically takes over critical operations if the primary data center fails. To help prevent the possibility of overlapping catastrophic events causing the failure of a pair of data centers, each primary data center is maintained in a different geographic region from its matching secondary data center.

#### **4.0.2.5.4 (M) Ability to thoroughly and completely destroy obsolete records upon completion of legal retention period.**

"Supported"- Messages retained in the archive may be thoroughly, completely and irrevocably destroyed once the period of legal retention expires. Messages can be purged automatically or manually.

#### **4.0.2.5.5 (M) Ability to store and retrieve all email data for a State of Utah specified time period before data is automatically processed for long term archiving.**

"Supported"- Google Apps Administrators can set users data to store for 180 days before it is deleted, and with Message Archiving retention periods ranging from 1 month to 120 months (10 years). Additionally, retention policies are associated to an Organization with one or more users being assigned to an organization. There is no limit to how many organizations you may create. The flexibility to set retention periods on a per-organization basis allows you to tailor message retention to the needs of various user groups.

#### **4.0.2.5.6 (M) Centralized message archiving for up to seven years.**

"Supported"- Google Message Discovery (GMD) is an easily-deployed, hosted service that helps your organization manage email retention and security. GMD offers unlimited storage for retention periods of 1 or up to 10 years.

#### **4.0.2.5.7 (M) Ability to archive data based on content, sender, recipient, dates, and other metadata and attachments.**

“Supported”- Google Message Discovery (GMD) includes unlimited storage for 1- and 10-year retention periods, obviating the need to archive data based on content rules. Instead, GMD archives email on a per-sender (user) basis for a set of users designated by the organization. All of the email, including attachments, is retained by default. This information is searchable by all the fields mentioned (content, sender, recipient, date, attachments and other metadata/structured or unstructured email fields) for the purposes of legal discovery and archiving.

If the organization has the requirement to archive subsets of data by content, sender (if different than above), metadata and/or attachment then it can use the audit api to create content rules to effect this requirement. There is no additional cost for the API. GMD is priced separately.

#### **4.0.2.5.8 (M) Ability to verify authenticity, reliability, and integrity of email records.**

“Supported”- Mail is stored separately in an immutable archive that is protected using a multi-layer security strategy that combines advanced technologies, industry-standard policies, and best practices, Google/Postini maintains the availability, integrity, and confidentiality of its systems and its clients’ messages.

Message Archiving processes your organization's electronic messages in geographically-distributed primary and secondary (backup) data centers. Each data center is located in a physically secured facility with SAS-70 certification, is serviced by a Tier-1 or better network provider, and contains multiple layers of redundancy for network connectivity and power. During the processing of a message, indexing servers create an index for the message, and then store the index on multiple devices. When the message processing has finished, the message is then written to at least two separate geographical locations.

Google/Postini's multi-layer security strategy is comprised of seven components: privacy and data integrity, and organizational, physical, network, application, host, and operational security.

As part of this security strategy, Google/Postini regularly undergoes extensive third-party and self-assessment audits of its security measures, to verify its operation integrity and ensure that it protects the privacy of its customers’ data.

To verify that its security strategy maintains operation integrity and that it follows best practices for security, Google/Postini has implemented a comprehensive audit and verification program. This program includes:

- Annual audits of privacy, security, and availability from independent auditing organizations
- Customer audits as requested
- Quarterly internal audits
- Quarterly vulnerability reports
- Compliance with any additional, country-specific security requirements

#### **4.0.2.5.9 (M) Ability to retrieve or e-Discover archived data based on content, sender, recipient, and/or other metadata and attachments.**

"Supported"- Google Message Discovery (GMD) includes the following search panels into which administrators can enter criteria to retrieve archived messages:

- Email Search panel: provides fields that let administrators enter criteria to find archived email messages by sender, recipient, "has attachment", body, data range search, match all or any included or excluded word combination.
- Boolean Search panel: lets administrators enter their own query strings, using the Apache Lucene query syntax. This syntax supports Boolean operators, wildcards, fuzzy matches, and proximity matches, allowing users to create more-complex or targeted search queries.

Administrators can set up investigations to save and organize their search criteria and results, so they don't have to redo them later on. Searches may be span multiple inboxes or be restricted to a single sender or recipient.

Google also provides an audit API at no additional charge. The Google Apps Audit API allows Google Apps administrators to audit a user's email, email drafts, and archived chats. In addition, a domain administrator can retrieve account login information and download a user's mailbox.

#### **4.0.2.5.10 (M) Ability to view, and perform all normal email functions on archive by an email administrator without having to restore.**

"Supported"- The Google Message Discovery (GMD) service is designed to provide administrators with the ability to archive email messages with no storage limitations while at the same time using an indexing system so that results can be quickly obtained regardless of the scope of the query or the age of the data -- all without having to resort to restoring.

The freedom to store emails without space and time constraints allows administrators to manage an archive focusing exclusively on policies driven by business requirements, rather than technical limitations. Once an email is archived it cannot be altered. It can be viewed, printed, restored (sent as a copy) or placed on hold. Restored emails modified or used in a new email will be "re-archived."

#### **4.0.2.5.11 (M) Ability to transfer to the Utah Division of Archives, complete email records of permanent value, with associated metadata, attachments, and threads, upon completion of legal retention period.**

"Supported"- Administrators with the appropriate privileges can export individually selected or all messages in their search results, along with any file attachments, to an MBOX file or a PST file (in the case of "all messages").

MBOX is an industry-standard mailbox format that stores one or more exported messages in a single text file. MBOX files are compatible with many email programs, text editors, and litigation support software

PST is a Microsoft format. Administrators can import PST files in Outlook, or open unencrypted PST files in text or hexadecimal editors.

#### **4.0.2.5.12 (M) Ability to apply legal retention periods and disposition by agency per State policy and/or legal requirements.**

"Supported"- The State can manage users' archived email by arranging them into groups called organizations (or orgs, for short). An org can be configured to give its users specific archive retention periods (1 to 120 months) or management control, such as a support address, email policy, or administrator access. The state can retain messages longer than this retention period if it turns off Auto-purge.

You can also create sub-organizations (or sub-orgs) below an org, to create a finer level of control within a larger group.

The State can use the Auto-purge option to have Message Archiving automatically delete messages at the end of the month in which their retention periods expire, or can choose to manually purge messages from the archive. The State can also place a hold on saved search results, which temporarily halts automatic message deletion. This option may be useful during an investigation or notice of litigation.

#### **4.0.2.5.13 (DR) Automated rule capability for archiving specified users per state policy, the Government Records Access and Management Act (GRAMA) and Public Records Management Act requirements.**

"Supported"- The administrator sets up Message Archiving to archive the email messages for all users or only specific users. Message Archiving captures email messages that users receive from, and send to, others outside the organization's network. Additionally, administrators can place a hold on specified user(s). Holds can be placed on all messages, all past messages from the date of the hold or all messages in the future from the date of the hold.

#### **4.0.2.5.14 (DR) Ability to store/manage in record series and apply legal retention periods and disposition to records by agency per State policy or legal requirements.**

"Supported"- The State can manage users' archived email by arranging them into groups called organizations (or orgs, for short). An org can be configured to give its users specific archive retention periods (1 to 120 months) or management control, such as a support address, email policy, or administrator access. You can also create sub-organizations (or sub-orgs) below an org, to create a finer level of control within a larger group.

#### **4.0.2.5.15 (DR) Ability to extract archived data to an XML file that contains human-readable elements, attributes, and pointers, while retaining necessary context (sender, recipient, date).**

"Supported"- Administrators with the appropriate privileges can export individually selected or all messages in their search results, along with any file attachments, to an MBOX file.

MBOX is an industry-standard mailbox format that stores one or more exported messages in a single text file. MBOX files are compatible with many email programs, text editors, and litigation support software, and can be converted to XML using third-party utilities such as Aid4Mail ([www.aid4mail.com](http://www.aid4mail.com))

#### **4.0.2.5.16 (DR) Ability for users to view email filtered by the state.**

"Supported"- The Message Security service detects spam by applying hundreds of rules to each message that passes through the data center. It can block obvious spam immediately, and then divert more borderline spam to Quarantine for later evaluation. From there, administrators or users can review the Quarantine for any legitimate messages that were falsely quarantined and need to be forwarded to the user's Inbox. Otherwise, spam is deleted automatically.

For each of the State's agencies, administrators can adjust the overall aggressiveness of filtering, filter specific categories of spam more aggressively, and choose a spam disposition. Some of these settings are made at the org level, and some for a Default User. Administrators can also adjust individual user's filtering, or allow users to do this themselves at the Message Center.

#### **4.0.2.6 SOLUTION ADMINISTRATION**

##### **4.0.2.6.1 (M) Ability of the state to fully manage identity and user accounts.**

"Supported"- The Google Apps Control Panel gives administrators the ability to add, delete, manipulate (rename, set passwords, add nicknames, edit group memberships, grant administrator privileges), suspend and delete all user accounts.

Google provides three robust ways to manage identity and user account information. Administrators can manage user identity and account information directly in Google Apps or can continue to manage users in the organization's existing directory (LDAP) system and synchronize that with Google Apps using Google Apps Directory Sync (GADS).

- The Google Apps control panel provides a robust and simple-to-use interface to manage users, groups and organizations.
- GADS is a free graphical tool that you set up once which pushes account creations, modifications, deletions and suspensions from your LDAP system to Google so that the State does not have to manage two separate directories.
- Google makes a provisioning API available for application integration with the State's ERP or HR systems and other applications. For more information see:  
[http://code.google.com/googleapps/domain/gdata\\_provisioning\\_api\\_v2.0\\_reference.html](http://code.google.com/googleapps/domain/gdata_provisioning_api_v2.0_reference.html)

##### **4.0.2.6.2 (M) Ability to detect and reject SPAM email at the domain level.**

"Supported"- Google Message Security (included with Google Message Discovery), powered by Postini, is a secure, hosted service that provides enterprise-grade spam and virus protection, and e-mail content filtering, delivering cost-effective e-mail management. Because the Google Message Security service is hosted, actual detection and filtering of suspicious mail occurs not in your email environment, but at Google's external data center. This is a robust and secure cluster of servers that sits between your users and the Internet, and is wholly managed by Google's personnel. Google Message Security automatically enforces your e-mail security policies to help assure legal and regulatory compliance for both inbound and outbound e-mail across your organization. The service also provides a convenient web console for administration, enabling real-time configuration and policy (anti-spam, anti-virus, content filtering etc.) modifications, monitoring, and alerting, as well as comprehensive reporting for administrators.

An overview of the service architecture can be found at:  
[http://www.postini.com/webdocs/admin\\_ee\\_cu/arch\\_architecture.html](http://www.postini.com/webdocs/admin_ee_cu/arch_architecture.html)

**4.0.2.6.3 (M) Ability to provide anti-virus protection, including spyware.**

"Supported"- Google Message Security service blocks a wide range of email attacks at the connection level, filters spam and viruses, and can approve, block, or divert messages based on sender address or domain, origin IP address, attachment size or file type, text content, and more. It does this without requiring you to install additional software or hardware. Instead, users' incoming email is processed at Google's highly secure and reliable data center, before reaching your server. Within milliseconds, spam and viruses are separated from legitimate messages. Legitimate messages are delivered to recipients without delay, while suspicious messages are deleted, or sent to a quarantine, where they can be optionally reviewed or delivered to the user.

**4.0.2.6.4 (M) Ability to integrate with internal applications using email, specifically using secure SMTP, IMAP, SOAP, POP3, etc.**

"Supported"- Google Apps Mail supports SMTP, IMAP and POP3 protocols. SOAP services can be accessed using Google Apps Script.

**4.0.2.6.5 (M) Ability to migrate all data to a successor solution provider.**

"Supported"- If the contract is terminated, Google provides Customers with access to the Customer's Data for a period of time and Google will provide the tools necessary for migration. See Section 11.2 of their agreement ("(ii) Google will provide Customer access to, and the ability to export, the Customer Data for a commercially reasonable period of time at Google's then-current rates for the applicable Service;"). Google does not impose any additional costs or penalties for cessation of a contract. Moreover, Google provides a number of free tools, managed by the Google Data Liberation Front team, for migration away from Google Apps. The Google Data Liberation Front is an engineering team at Google whose singular goal is to make it easier for users to move their data in and out of Google products. Google does this because they believe that you should be able to export any data that you create in (or import into) a product. They help and consult other engineering teams within Google on how to "liberate" their products. This is their mission statement: Users should be able to control the data they store in any of Google's products. The DLF team's goal is to make it easier to move data in and out. To that end, Google has a rich set of API's and tools to allow you to move your data out of Google and to other platforms; either cloud-based or hosted. A list of APIs can be found at: <http://code.google.com/googleapps/docs/>.

Additionally, Google supports standard email protocols such as POP, IMAP and MAPI that making moving your data to and from Google simple. We haven't seen instances of customers moving from one hosted system to another, but it's technically possible and our apis and support for protocols would be the mechanism by which this would be accomplished. The migration tools provided by Google have no cost and customers can work with us to implement the migration processes.

**4.0.2.6.6 (M) Ability of the state to fully manage all accounts within the network, including, but not limited to addition, deletion, manipulation, suspension, and termination.**





The Google Apps Control Panel gives administrators the ability to add, delete, manipulate (rename, set passwords, add nicknames, edit group memberships, grant administrator privileges), suspend and delete all user accounts.

With Google Apps Directory Sync (GADS), the State can automatically provision, delete (terminate), modify, or suspend users, groups and non-employee contacts based on data in its existing directory server. GADS connects to your directory and synchronizes Google accounts to match your organizational schema. You can also synchronize rich user profile data like home/work/mobile phone numbers, addresses, job titles and more.

#### **4.0.2.6.7 (M) View all calendars and appointments.**

"Supported"- Administrators have full access to all calendars in a domain, and can see all event details, regardless of whether individual users have shared calendars.

#### **4.0.2.6.8 (M) Mobile Web version of mail, contact, and calendar applications.**

"Supported"- Google Apps aims to provide users with seamless access to information regardless of location or device. Google Apps supports access to Gmail, Google Calendar, Docs, and Contacts from most common types of mobile devices.

Calendars and appointments can be viewed via the native web interface, mobile clients such as Blackberry, iPhone and Android, POP/IMAP clients, and Microsoft Outlook.

##### **Blackberry**

Get the benefits of Google Apps with the BlackBerry experience you're already accustomed to. Integrate the Google Apps messaging suite with BlackBerry Enterprise Server (BES), letting employees use built-in BlackBerry applications for access to their Google Apps email, calendar, and contacts. Two-way wireless synchronization from Google Calendar to your BlackBerry, including the ability to accept/decline meetings, schedule new meetings, move meeting times, add/remove attendees. Google also supports Blackberry's native administration capabilities such as setting password rules and perform remote wipes of lost devices.

##### **iPhone**

iPhone users can access Google services over the web or via the device's native clients.

##### **Gmail, Google Calendar and Google Docs in the mobile browser**

These apps are available with a streamlined web interface, where you can easily bookmark a single web address and seamlessly switch between applications.

##### **Gmail, Google Calendar and Contacts on pre-installed applications**

You can connect to your iPhone, iPad or iPod Touch's Mail, Calendar and Contacts applications to Gmail using Google Sync.

##### **Google Sync**

Google Sync offers two-way synchronization between your calendar, contacts and email on the iPhone, iPad or iPod Touch and Google Apps. Updates are done automatically. Whether you update appointments and contacts from your mobile device or from your computer, you always have access to up-to-date information. Google Sync also offers controls for administrators to help ensure corporate policy enforcement across a range of mobile devices.

### **Android**

On some Android-powered devices, (for instance the T-Mobile G1) Google applications come pre-installed. Access these apps by tapping their icons. When setting up the phone, make sure to log in using the username and password for your domain, and your content will be automatically synced on the go.

### **Other Mobile Platforms**

Gmail supports the ability to push mail, calendar and contact information for BlackBerry and ActiveSync mobile clients; including, but not limited to the following mobile device platforms; BES/BlackBerry, Apple/iPhone, Windows Mobile, Android and Palm.

Google supports POP and IMAP clients as well, ensuring that virtually any mobile device may access Google services.

Mobile is an essential component of a cloud-solution and Google is proud to have the most robust functionality of any cloud vendor in this space.

### **4.0.2.6.9 (M) Migrate historical or user archives from the current proprietary format to the proposed solution for implementation.**

"Supported"- For this portion of the proposal we will partner with Nexic, Inc. a proven leader in GroupWise email systems. Nexic Journaling sends a copy of the Novell GroupWise email messages and associated file attachments via the SMTP protocol (using SSL/TLS encryption) to the Google Message Discovery server. Journaled messages are in the Message Envelope format supported by Google Message Discovery. Nexic Journaling uses low-level, native GroupWise programming interfaces to search for messages within the GroupWise post office as well as personal archives.

To archive internal GroupWise messages, Nexic Journaling connects to all or specific GroupWise accounts, and searches for the messages that meet the desired search conditions. A search condition may be as simple as "all messages", or any other desired search results such as message type, sent or received, etc.

Nexic Journaling jobs can optionally be created to journal messages based on a date range. This allows the journaling of current messages (e.g. the past 90 days), and/or historical messages (e.g. older than 90 days) to Google Message Discovery. To create a historical journaling job, the same type of job is created, but different search criteria may be defined such as "all messages between January 1<sup>st</sup> and April 30<sup>th</sup>."

Nexic Journaling can also connect directly to the GroupWise post office database, without having to connect to the GroupWise post office agent, which can dramatically increase journaling performance. This also gives the ability to journal GroupWise messages after the GroupWise system has been turned off, and no longer is the current email system.

The following are key elements of historical journaling:

- The original creation date of the message can be preserved as the creation date of the journaled message, so it will reflect in Google Message Discovery as being created on the original date.
- Older messages can be journaled from the live system or directly from a backup copy of the post office database, such as a backup created by Nexic Recover or Reload.

- Messages can be journaled from the user's GroupWise personal archive.

Please refer to Attachment B for the Nexic Statement of Work.

#### **4.0.2.6.10 (M) Ability to administer the solution in a distributed manner to different governmental entities.**

"Supported"- Google Apps is web-based and provides distributed management capabilities that are more robust than on-premise solutions.

The administrative control panel can be used by administrators in a distributed fashion across regions. It is web-based requiring only an internet connection and a web browser for access. Administration privileges may be delegated and distributed to different governmental entities across your domain. You can manage user accounts and email lists, customize the interface to your needs, and monitor activity statistics.

#### **4.0.2.6.11 (M) Perform e-Discovery functions (search, retrieve, manipulate search results, etc.) on all accounts, and multiple mailboxes, within the State's domain.**

"Supported"- Administrators are able to search, retrieve, manipulate search results, etc. on all e-mails in the Google Message Discovery archive for all accounts.

#### **4.0.2.6.12 (M) Support for SyncML (Open Standard) for mobile device synchronization with ability to control BlackBerry, iPhone, Android, and other such mobile/smart devices, with at a minimum calendar, contacts, and email functionality (e.g. BlackBerry Enterprise Server (BES), ActiveSync, etc.).**

"Supported"- With the Google Apps Connector for BlackBerry Enterprise Server, the following features are available:

1. **Push email delivery and send:** Messages sent from and received in your Gmail inbox are automatically pushed to your BlackBerry device within 60 seconds, keeping both inboxes up-to-date.
2. **Read/delete synchronization:** Emails read or deleted on your BlackBerry device are marked as read or deleted in your Gmail inbox, and vice-versa.
3. **Folder/label synchronization:** Select folders on your BlackBerry device to synchronize with labels in your Gmail interface.
4. **Global address lookup:** Search for and access email addresses and phone numbers for other users on your company domain.
5. **Calendar access:** View your Google Calendar events and schedule from the native BlackBerry application, with two-way synchronization from your Google Calendar to BlackBerry device.
6. **Contacts synchronization:** Contacts in your BlackBerry address book and in your Gmail account are automatically synchronized. Information added to Gmail is pushed to your BlackBerry device within 5 minutes, and vice-versa.
7. **Hosting Support:** Support multiple Google Apps domains on a single BlackBerry Enterprise Server. This enables our partners to offer hosted services for supporting BlackBerry devices by sharing a single BlackBerry Enterprise Server across multiple Google Apps customers. For more information on using Google Apps with Blackberry and

other mobile devices, please refer to:

<http://www.google.com/apps/intl/en/business/mobile.html>

Using Google Sync, Gmail messages are pushed directly to your phone. Having an over-the-air, always-on connection means that your inbox is up to date, no matter where you are or what you're doing. Sync works with your phone's native email application so there's no additional software needed. Google Sync allows you to sync just your Contacts, Calendar, or Gmail, or any combination of the three. Google Sync also provides robust administrative controls for mobile devices without having to deploy any additional software or manage enterprise mobile services; Google Apps customers can manage their employees' mobile devices right from the Google Apps administration control panel. These controls will enable new administrative policies for employees using iPhones, Windows Mobile devices, and Nokia E series phones including:

- Remotely wipe all data from lost or stolen mobile devices
- Lock idle devices after a period of inactivity
- Require device passwords on each phone
- Set minimum lengths for more secure passwords

Require passwords to include letters, numbers and punctuation.

#### **4.0.2.6.14 (M) Ability to apply state defined administration policies in managing solution.**

"Supported"- Google Apps provides the ability to apply administration policies at the domain, group, and user level.

- Email Communications: administrators can apply administrative policies for either individual users or groups of users to the Google Apps communication services. This includes policies such as email routing behavior, data retention policies for discovery, as well as email filtering, spam and virus configuration.
- Collaboration Services: administrators can define policies that control users' ability to share collaborative services (Google Docs, Google Sites) information within the domain, as well as outside the domain.

- Service Availability: administrators can define, for individual users or groups of users, which component Google Apps services are available for use. New services can be rolled out to specific groups of users for evaluation and testing prior to the service being made available for all internal users.

- Mobile Device Management: mobile devices may also be managed through Google Apps, including the setting of policies around data encryption, password requirement and password strength, screen locking timeout following inactivity, and remote-wipe ability.

#### **4.0.2.6.15 (M) Manage attachment size.**

"Supported"- Google Message Security allows administrators to set the attachment size limit from 1MB to 300MB. Different attachment sizes can be set for different organizations. There is a limit of 25MB for attachments for all Google Apps users.

Google provides Attachment Manager to filter messages based on the size or file extension of any attachments. Each of several filters can have its own disposition, or method of processing filtered messages. For example, an organization can bounce messages whose attachments

exceed 200 MB, centrally quarantine messages with attachments that are .exe files, and user quarantine attached image files. Attachment Manager can also send notifications to administrators or users when messages are either bounced or redirected to an administrator's quarantine.

#### **4.0.2.6.16 (M) Ability to use a variety of domain names used within governmental entities as email extensions, such as utahsenate.org.**

"Supported"- Google supports the ability to manage all or some of Utah's domains, subdomains and aliases through a single administrative console or alternately in separate control panels.

#### **4.0.2.6.17 (DR) Ability to self provision safe lists and review and accept filtered messages.**

"Supported"- Users can choose whether to approve or block specific senders, based on the sender's address or domain:

- Approved Senders List (Whitelist): Messages from approved senders are delivered to a user's Inbox, regardless of spam-like content.
- Approved Mailing List (Whitelist): Messages sent to users of mailing lists are approved to automatically bypass spam filters.
- Blocked Senders list (Blacklist): Messages from blocked senders are quarantined, regardless of content.

Users can safely review the content of messages in the Message Center, without risking harm to their computers, and accept them for delivery to their inbox, subject to administrative policies.

#### **4.0.2.6.18 (DR) Setup mail routing.**

"Supported"- Delivery Manager allows you to:

- Balance the load of message traffic across multiple email servers.
- Set up fail over.
- Identify server outages and alert the administrator.

Delivery Manager balances inbound message load across multiple email hosts, regardless of the email server's geographic location or operating system. The Delivery Manager works independently of such limitations because the email security service architecture relies on the SMTP email standard. You can assign multiple email servers to one email configuration from the Delivery Manager page. This will work as long as the user groups under that particular email configuration can share the same email servers.

Dual Delivery is a setting in Delivery Manager that sends approved mail to the same user on multiple mail servers. When organizations set up Dual Delivery, the message security service will send approved mail to their primary mail server plus a second mail server that they specify.

#### **4.0.2.6.19 (DR) Ability to filter email messages at the sub domain or user level.**

"Supported"- Google Message Security supports "organizations" as a way of applying policies differentially across user populations. Sub domains can be associated with separate organizations to enforce separate filter policies, or policies can be applied to individual users

(though this isn't recommended). In addition, users can control their own filter levels if this has been enabled by the administrator.

Content Manager scans email messages for specific content—words, phrases, or text patterns—and then takes an action on any messages that contain that content. For example, you can set up Content Manager to quarantine any inbound message that contains specific text in its subject line. Use Content Manager to help secure your network, enforce email content policies, prevent leakage of proprietary information, and protect private information.

Two versions of Content Manager are available:

**Inbound Content Manager:** Scans email messages sent to your users from outside your network. Inbound Content Manager is included with most service packages.

**Outbound Content Manager:** Scans messages that your users send to others outside your network. Outbound Content Manager requires the Outbound Services option.

#### **4.0.2.6.20 (DR) Support for Blackberry Synchronization without a BES server.**

"Supported"- Google provides a native Blackberry App, as well as support, for non-BES Blackberry protocols such as HTTP/HTTPS, IMAP and POP to enable users to access their essential mail, calendar and contacts without a BES Server.

Google does offer a connector to interface with an existing Blackberry Enterprise Server, but a BES is not required.

#### **4.0.2.6.21 (DR) Ability to set automatic settings for auto archive, auto delete, etc.**

"Supported"- Google offers fully integrated options to enhance and extend its capabilities for legal compliance and retention via Google's Message Retention and Discovery products:

- Auto Archive: administrators can configure auto archiving for retention periods from 60 days to 10 years by organization
- Auto Delete: administrators can configure auto delete for end of the month in which their retention periods expire, or manually purge messages from the archive

In addition, administrators can, at any time, request:

- An extension to the retention period for any organization in the hierarchy
- A records hold, which temporarily halts automatic message deletion; this option may be useful during an investigation or notice of litigation.

#### **4.0.2.6.22 (DR) Review restricted email.**

"Supported"- Administrators have the ability to review the email of restricted users, subject to policy.

They can:

- Review and safely open quarantined messages for analysis
- Find messages based on sender, subject, or content
- Deliver legitimate messages to the user
- Deliver messages they want to review further to their own administrator account.

- Delete messages

#### **4.0.2.6.23 (DR) Ability to synchronize email identities with identities that are managed in the State's authentication directory.**

"Supported"- Google Apps' Directory Sync product is configured by an administrator to query the State's authentication directory (LDAP) system, and provision identities for users and groups. Once invoked from the scheduler, Directory sync will use the predefined configuration information to connect to the customer directory, extract all relevant information from LDAP as per the defined filtering criteria, retrieve information from States account, compare States account data and LDAP data and prepares the list of update needed on Google/Postini account. Then it will make the necessary additions, updates and/or deletions in the Google account.

Through the use of SAML, Google can integrate with the State's desired authentication mechanism.

#### **4.0.2.6.24 (DR) Set email storage limits per user based on maximum storage limits that are set by the governmental entities.**

"Supported"- One of the key advantages of Google's cloud architecture is that the State doesn't have to worry about capacity. Each user receives 25GB of email storage; actual storage usage can be monitored through the administrative panel or via API.

Google Message Discovery (GMD) comes with an unlimited amount of storage, so it is not necessary to manage your quota, but a retention policy may be set to satisfy the requirements of your organization. There is no extra charge for unlimited storage for GMD.

#### **4.0.2.6.25 (DR) Print historical, statistical, and usage reports locally.**

"Supported"- The Google Message Security administrative interface provides reporting on email message traffic, traffic analysis, spam and virus traffic, as well as usage over time. The Google Apps core administrative interface provides the following reports:

- *Accounts Report* (All hosted accounts in your domain on a particular day)
- *Activity Report* (the number of active and idle accounts over several time periods)
- *Disk Space Report* (Shows the amount of disk space occupied by users' mailboxes)
- *Email Clients Report* (How users in your domain access their hosted accounts)
- *Quota Limits Accounts Report* (Contains a list of the accounts that are approaching or have exceeded their disk space quota)
- *Summary Report* (Contains the total number of accounts, total mailbox usage and total mailbox quota for your domain)
- *Suspended Accounts Report* (Lists all of the suspended accounts in your domain on a particular day)

Most reports can be run for the current and the last month. These reports can be downloaded and printed on demand.

Additional reports are available via customization and development using the Reports API. Google Message Discovery also offers a myriad of reporting options for e-Discovery as well.

#### **4.0.2.6.26 (DR) Manage multiple separate Global Address Lists (GALs).**

“Supported”- Each customer domain has two types of Global Address Lists. The first type are domain users. This is the Global Address List of all users currently registered in the customer domain. The other type of contacts are known as Domain Shared Contacts. These are contacts that are external to your domain, but users in your domain may require access to their details, such as other governmental entities. The shared contact list is made available to all members of your domain, allowing users on your domain to collaborate both with others within the domain, and a centralized set of people outside your domain.

Domain users are managed via the Google Apps Admin Control Panel. The shared contacts are managed separately to the domain user list, in a web portal designed by Onix Networking. If the governmental entity uses the Google Apps Connector for Blackberry Enterprise Server, the Blackberry GAL can be managed using an application developed by Onix Networking.

#### **4.0.2.6.27 (DR) Prioritize email accounts.**

“Supported”- With Google Message Security, we can prioritize e-mail accounts by taking advantage of intelligent routing—normal e-mail flow in one route, in the other route, the Administrator can identify priority accounts. If a failure occurs, priority account e-mails will be spooled. When the system the e-mail system is restored the spooled email will automatically be released. Enough spooling is allocated to spool all of Utah's e-mail accounts for seven days.

Additionally, at the user-level, Google provides an optional capability called Priority Inbox. Using sophisticated algorithms, Google is able to do relevancy weighting in each user's in box to determine the relative importance of each message received.

- Automatic sorting: Gmail uses a variety of signals to identify important email, including which messages users open and which they reply to.
- Sections keep the mailbox organized: incoming email gets separated into sections: important and unread, starred, and everything else. These sections can also be customized.
- Predictions improve over time: over time, Priority Inbox gets better at predicting what is important to the user.

#### **4.0.2.6.28 (DR) Use of “white list”, “blacklist”, and aliases.**

“Supported”- You can choose whether to approve or block specific senders, based on the sender's address or domain:

- Approved Senders List (Whitelist): Messages from approved senders are delivered to a user's Inbox, regardless of spam-like content.
- Approved Mailing List (Whitelist): Messages sent to users of mailing lists are approved to automatically bypass spam filters.
- Blocked Senders list (Blacklist): Messages from blocked senders are quarantined, regardless of content. Add specific senders, for example, who otherwise keep getting past your other filters. (This feature works only if spam filtering is turned ON.)

User aliases are supported: all mail sent to an alias is automatically directed to the user's actual inbox.





#### **4.0.2.6.29 (M) Ability for end users to “tag”, “block”, and “filter” incoming emails as spam.**

“Supported”- Users may tag messages Spam or Not Spam. The more spam users mark, the better the system gets at weeding out those annoying messages. If a good message is inadvertently marked as spam, the user can reset its status. Users can also define email filters.

#### **4.0.2.7 INTEGRATION**

##### **4.0.2.7.1 (M) Application integration for applications that utilize email notifications.**

“Supported”- Applications can send or receive email using standard POP3 or IMAP access to a Gmail account. Beyond this, Google Apps has a very extensive API set. There are both 3rd party applications pre-integrated (see the Google Apps Marketplace) as well as the ability to custom write applications within your organization. Please see the following URL for additional information: <http://code.google.com/googleapps/>

##### **4.0.2.7.2 (M) Ability to manage Mobile Devices including security and provisioning for employee owned mobile devices.**

“Supported”- Google provides this capability.

##### **Blackberry**

Get the benefits of Google Apps with the BlackBerry experience you're already accustomed to. Integrate the Google Apps messaging suite with BlackBerry Enterprise Server (BES), letting employees use built-in BlackBerry applications for access to their Google Apps email, calendar, and contacts. Two-way wireless synchronization from Google Calendar to your BlackBerry, including the ability to accept/decline meetings, schedule new meetings, move meeting times, add/remove attendees. Google also supports Blackberry's native administration capabilities such as setting password rules and perform remote wipes of lost devices.

##### **iPhone**

iPhone users can access Google services over the web or via the device's native clients.

##### **Gmail, Google Calendar and Google Docs in the mobile browser**

These apps are available with a streamlined web interface, where you can easily bookmark a single web address and seamlessly switch between applications.

##### **Gmail, Google Calendar and Contacts on pre-installed applications**

You can connect to your iPhone, iPad or iPod Touch's Mail, Calendar and Contacts applications to Gmail using Google Sync.

##### **Google Sync**

Google Sync offers two-way synchronization between your calendar, contacts and email on the iPhone, iPad or iPod Touch and Google Apps. Updates are done automatically. Whether you update appointments and contacts from your mobile device or from your computer, you always have access to up-to-date information. Google Sync also offers controls for administrators to help ensure corporate policy enforcement across a range of mobile devices.

##### **Android**



On some Android-powered devices, (for instance the "Droid" series phones) Google applications come pre-installed. Access these apps by tapping their icons. When setting up the phone, make sure to log in using the username and password for your domain, and your content will be automatically synced on the go.

#### **Other Mobile Platforms**

Gmail supports the ability to push mail, calendar and contact information for BlackBerry and ActiveSync mobile clients; including, but not limited to the following mobile device platforms; BES/BlackBerry, Apple/iPhone, Windows Mobile, Android and Palm.

Google supports POP and IMAP clients as well, ensuring that virtually any mobile device may access Google services.

#### **Policies and Security**

Google's controls enable administrators to help ensure corporate policy enforcement across a range of mobile devices. Administrators can manage their users' Android, iPhone, Nokia E series and Windows Mobile devices right from the Google Apps administrative control panel, without deploying any additional software or having to manage dedicated enterprise mobile servers.

Features include, but are not limited to:

- Remotely wipe all data from lost or stolen mobile devices
- Lock idle devices after a period of inactivity
- Require a device password on each phone
- Set minimum lengths for more secure passwords
- Require passwords to include letters, numbers and punctuation

Google Apps tightly integrate with BlackBerry Enterprise Server letting administrators manage BlackBerry access using the tools and policies with which they're already familiar.

Features include, but are not limited to:

- Administrators can use the management and security tools that are part of BlackBerry Enterprise Server.
- Support for key BlackBerry Enterprise Server features such as remote wipe and IT policy administration.
- Support for BlackBerry Enterprise Server 5.0.2.
- Support for BlackBerry Enterprise Server Express

#### **4.0.2.7.3 (M) Ability to instantly search address lists while addressing emails and appointments.**

"Supported"- Google Apps contacts manager knows the addresses of all your personal contacts and all other Faculty and Staff, mailing lists, vendors, suppliers, and so on. In addition, it automatically remembers email addresses of other people outside of the State with whom you've corresponded. Therefore, when you start typing an address in an email message or meeting invitation, the addresses of personal contacts, employees, and anyone with whom you've corresponded automatically appear.

#### **4.0.2.7.4 (DR) Infrastructure devices that utilize email notifications.**



"Supported"- Google supports email notifications via SMTP with SSL from internal applications and servers.

In addition, If your devices support SSL/TLS, as well as SMTP authentication, they can be configured to print using the Gmail SMTP Gateway. If the device does not support it, it may be possible to set up a tunneling proxy on your network, to provide the secure connection, via additional configuration.

#### **4.0.2.7.5 (DR) Documented information and availability of email APIs for integration with other services (e.g. Salesforce contacts, calendaring, and tasks).**

"Supported"- Google Apps offers several APIs for various functions (Contacts, Calendars, Documents, User Provisioning, etc). For a complete list of APIs, as well as reference guides and code samples visit: <http://code.google.com/apis/gdata/docs/directory.html>.

#### **4.0.2.7.6 (DR) Support for directory protocols such as S.DS.P, LDAP, X.500, etc.**

"Supported"- With Google Apps Directory Sync, you can automatically provision users, groups and non-employee contacts based on the user data in your LDAP server, such as Microsoft Active Directory. Google Apps Directory Sync connects to your Google Apps directory and adds/deletes user accounts to match your existing organizational schema.

Microsoft S.DS.P developers can implement against the same authoritative LDAP source.

### **4.0.2.8 TRAINING**

#### **4.0.2.8.1 (M) Availability of Online training documentation and other contextual help resources for end users.**

"Supported"- Onix will make all the slide decks used during training available to the end users, as well as make additional documentation available via a dedicated web site. A detailed list of all documentation provided can be found in Section 4.0.3.7.9 under Training Materials.

#### **4.0.2.8.3 (M) Defined processes and curriculum for training the trainer.**

"Supported"- Onix has seen limited success with the Train-the-Trainer approach as the recipient trainers cannot, in a timely fashion, become experts on the entire Google Apps platform. Therefore, we do not recommend this approach for the State. However, if the State requires this approach, Onix will accommodate.

Onix has a complete set of training materials, as listed above in 4.0.2.8.1. We use these materials daily and update them regularly. These materials would provide the foundation for any training for your trainers, and would be "leave behind" documents for reference.

The methodology would be to provide training on each specific Google Apps component (e.g. Google Mail, Calendar, Talk, Video, Docs, Sites), as a separate class, and to address any issues or questions for the State's training team. Then we would address the overall platform, and cover integration or interoperability issues within Google Apps. Again, we would provide the supporting training materials for end user training at the State, to be used by your training resources.



Onix will also provide training on the Google Apps administration panel so that the training staff knows about global settings how these relate to end user functions. For instance, if you know that document sharing rules, or SSL enablement, or global settings you may select as an administrator of the domain, then you can answer accurately when end users ask questions about why communications must be encrypted or why documents may not be able to be shared in certain ways the State deems inappropriate.

Finally, we would work with the State trainers to package the modules into a "best-fit" approach for your users, perhaps separating Messaging and Collaboration training modules. Follow up is key as well, so Onix can be made available to monitor training sessions or be available for follow up after a training session as part of a Q&A wrap-up for unanswered questions.

#### **4.0.2.8.4 (DR) Availability of in-person training from the respondent.**

"Supported"- Onix can provide in-person training. This training will be limited by the physical facilities available and typically consists of smaller audiences such as State Officials, Helpdesk, IT, Executives, and/or Administrative Assistants. Please refer to Section 4.0.3.7.9 for more information on the Onix courses and training available.

#### **4.0.2.9 INSTANT MESSAGING (IM)**

##### **4.0.2.9.1 (M) Internal (limited to State of Utah domains) Instant Messaging.**

"Supported"- Google Apps includes instant messaging (Chat) which by default is enabled for internal messaging. Google chat supports the ability to restrict chat to users in its domain. In addition to restricting IM use to internal users, administrators may disable IM

##### **4.0.2.9.2 (M) External (cross domain, including non-state domains) Instant Messaging.**

"Supported"- Users can chat with other Google Apps and Gmail users (Google network), if the administrators enable their domain to send and receive instant messages from outside their domain. Google also makes it possible for the users to chat with people using other messaging services within a larger federated network. To let users chat outside the Google network, you will need to edit your Service (SRV) records in domain setting.

##### **4.0.2.9.3 (M) Support for IM user status and availability.**

"Supported"- Your status controls your availability to chat with others. Here's what the different statuses mean:

- Green: Available. You are online and ready to chat.
- Yellow: Idle. Your status automatically changes to idle when you're away from your computer for 15 minutes. You can't manually select to appear idle
- Red: Busy. This lets your contacts know you're busy and don't want to be interrupted
- Grey: Signed out of chat, or Invisible. If you set your status to **Invisible**, you'll appear to be signed out of chat even when you're actually signed in.

You can also create custom status messages in Gmail and iGoogle.

##### **4.0.2.9.4 (M) Ability to use respondent IM solution on desktop and mobile**



**devices.**

"Supported"- There are various ways to access Google Chat: access in the Google Mail interface, on iGoogle, on orkut, with the Google Talk Client, or even on your mobile device.

#### **4.0.2.9.5 (DR) Support for Extensible Messaging Protocol Clients (XMPP).**

"Supported"- Google's mission is to make the world's information universally accessible and useful. Google Talk, which enables users to instantly communicate with friends, family, and colleagues via voice calls and instant messaging, reflects our belief that communications should be accessible and useful as well. Their committed to open communications standards, and want to offer Google Talk users and users of other service providers alike the flexibility to choose which clients, service providers, and platforms they use for their communication needs. In addition to the Google Talk client, there are many other clients out there that provide a great communications experience. They believe users should have choice in which clients they use to connect to the Google Talk service and we want to encourage the developer community to create new and innovative applications that leverage our service. To enable this, Google Talk uses the standard XMPP protocol for authentication, presence, and messaging. Any client that supports Jabber/XMPP can connect to the Google Talk service.

#### **4.0.2.9.6 (DR) Audio and video communication with internal and external users.**

"Supported"- You can use voice and video capabilities in your Gmail, iGoogle and orkut chat window for both internal and external users. From within these services, you can have an actual conversation with someone or even chat face to face over video. Each party just needs to install the voice and video chat plug-in.

#### **4.0.2.9.7 (DR) Availability of user tracking options such as presence and/or the ability to proxy IM status.**

"Supported"- Unless the chat participants explicitly choose to have their conversation "off the record", the conversation is saved within the domain and participants will be able to search through their previous instant messaging conversations.

#### **4.0.2.9.8 (DR) Support for dragging and dropping files.**

"Supported"- You may drag and drop files into and out of the Google Talk client.

#### **4.0.2.9.9 (DR) Ability to archive and extract content and metadata associated with IM messages.**

"Supported"- IM's are stored, at your administrator's option, along with emails in the user-archive. They are then available for search and include original metadata such as users in the chat session, size, date and time sent.

#### **4.0.2.9.10 (DR) Specify how instant message content is retained and if saving IM content can be designated for non-retention by the State.**



"Supported"- IM's are retained at the optional election of your administrator. They are stored with the user's email, in the user's archive. Your administrator may optionally designate that IM's are not retained by keeping chat sessions off the record for all or a subset of users.

#### **4.0.2.9.11 (DR) Ability to share screens.**

"Supported"- Screen sharing is currently supported between users of Google Docs within Docs, Presentations, Drawings and Spreadsheets.

#### **4.0.2.9.12 (DR) Ability to create secure static chat rooms.**

"Supported"- All IM content is shared over a secure, TLS-based session, chat rooms for multiple users are supported and given the same protection.

#### **4.0.2.9.13 (DR) Ability for a user to join a chat initiated by a user, or with chat invitations.**

"Supported"- The group chat feature lets you chat with many friends at once. There's no limit to the number of people you can chat with, and any participant can invite others to join.

To end your chat, click the X at the corner of the chat window. Others in the group chat will get a message saying that you've left the conversation. If you want to rejoin, you'll need to be invited back by a contact who's still in the group chat. The group chat will continue until all participants have left.

#### **4.0.2.9.12 (DR) Ability to perform ediscovery actions on IMs**

"Supported"- The Google Apps Audit API allows Google Apps administrators to audit a user's email, email drafts, and archived chats. In addition, a domain administrator can retrieve account login information and download a user's mailbox.

### **4.0.2.10 COMMUNICATION and GATEWAY SERVICES**

#### **4.0.2.10.1 (M) Ability for Gateway (relay) to provide alerts and notification if service is compromised.**

"Supported"- The Google Apps Status Dashboard provides information on service disruptions and outages as well as additional information, where applicable, by service type (e.g. mail, calendar). Organizations can subscribe to notifications via an RSS feed.

For Google Apps customers, our recovery point objective (RPO) design target is zero, and our recovery time objective (RTO) design target is instant failover. Gmail, Google Calendar, Google Talk, Google Groups, Google Docs and Google Sites have a 99.9% uptime guarantee, and our actual reliability has been significantly higher than this commitment.

#### **4.0.2.10.2 (M) Ability for Gateway (relay) to provide bandwidth guarantee.**

"Supported"- Google's dedicated global data network has multiple nodes in the US, and its cold-potato model ensures that once a packet hits the network it remains on the network as long as



possible. Organizations will typically see the highest level of service for their Google services even when other areas of the internet are experiencing issues.

#### **4.0.2.10.3 (M) Ability for Gateway (relay) to restrict size and attachments.**

"Supported"- Google/Postini's attachment manager allows you to control the size of inbound and outbound message attachments. Use Attachment Manager to filter messages based on the size or file extension of any attachments. Each of several filters can have its own disposition, or method of processing filtered messages. For example, you can bounce messages whose attachments exceed 200 MB, centrally quarantine messages with attachments that are .exe files, and you can user quarantine attached image files.

Attachment Manager can also send notifications to administrators or users when messages are either bounced or redirected to an administrator's quarantine.

#### **4.0.2.10.4 (M) Ability for Gateway (relay) to provide authorization levels.**

"Supported"- Administrators have access to the Administration Console where users and organizations are managed. Each administrator must have a user account and assigned privileges to access organizations. Administrator privileges are assigned by creating an authorization record. The authorization record doesn't need to be in the same organization as the administrator -- the authorization record can be anywhere in the organization hierarchy. In addition, an administrator can have multiple authorization records with different privileges assigned to various organizations throughout the hierarchy. The privileges are automatically propagated down the hierarchy. When an authorization record is created for an administrator in an organization, the administrator has privileges for that organization and all of its sub-organizations

#### **4.0.2.10.5 (M) Ability for Gateway (relay) services to restrict sending functions by domains, sub domains, users, or IP ranges.**

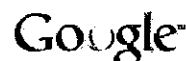
"Supported"- Content Manager scans email messages for specific content, words, phrases, or text patterns and then takes an action on any messages that contain that content. For example, you can set up Content Manager to quarantine any inbound message that contains specific text in its subject line. Use Content Manager to help secure your network, enforce email content policies, prevent leakage of proprietary information, and protect private information.

To use Content Manager, you must first configure it for one or more organizations in your organization hierarchy. You can then do either of the following:

- Create custom content filters to specify the content to scan for
- Set up content compliance policies, which include comprehensive, predefined content filters

Two versions of Content Manager are available:

- Inbound Content Manager: Scans email messages sent to your users from outside your network. Inbound Content Manager is included with most service packages.
- Outbound Content Manager: Scans messages that your users send to others outside your network.



Additionally, admins can create policies that limit the ability for some users to send or receive email with the world at large. Admins can define a whitelist of domains or addresses that are approved for communication and specify the relevant users that should be limited by that policy. For example, schools will be able to restrict a student organization to only be able to send and receive email within the district's domain while faculty and staff can send and receive mail to anyone on the Internet.

#### **4.0.2.10.6 (M) Ability for Gateway (relay) services to prioritize based on domains, sub domains, users, or IP ranges.**

"Supported"- You can divide them into groups called organizations (or orgs, for short). An org can be configured to give its users specific services or management control, such as a support address, email policy, or administrator.

You can also create sub-organizations (or sub-orgs) below an org, to create a finer level of control within a larger group. The resulting hierarchy is called your organization hierarchy.

There are three types of organizations:

- Account organization, which resides at the top of the hierarchy and is used for billing.
- Email server config is where you map the email security service to your email server, set up failover and load balancing, set up spooling, turn on attack blocking, and manually block or allow traffic from an IP address.
- User organization, are where you add users that should receive email protection, and also where you add their domains. Each org can be configured to provide its users with specific services, filter settings, administrators, and other policies. Placing users in an org applies its settings to those users. Changing a setting applies the change to the entire org. By grouping users in organizations, it's easy to manage users based on their geographical location, role in the company, service level, filtering needs, and so on.

#### **4.0.2.10.7 (DR) Ability to translate electronic communication, including conversion of audio voice mail to text.**

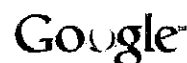
"Supported"- Google Apps (Gmail, Docs, Spreadsheets, Google Voice), include the ability to translate electronic communication from any one of 52 languages. Google Voice converts audio from voice mail messages to text.

When Gmail detects one of your messages is in a language other than your default language, a header will be displayed at the top of the message. Click the link that says **Translate message to....** Your message will be translated inline (no need to open a new tab or window). If you want to translate the message and print it too, you can click the down arrow next to the **Reply** button and select **Translate and print**.

You can also translate an entire conversation. Click the globe icon on the right side of the conversation and the conversation will be translated for you.

If you'd like to change the language your messages are translated to (let's say it prompts you to translate a Japanese message to English, but you'd prefer to read it in Spanish), just click the **Change language** link in the header and select your preferred language and select your





preferred language, or go directly to the **Settings** page and change the setting for your 'Default translation language.'

Google Spreadsheets includes functions to translate and detect languages. Example: Use the formula '=GoogleTranslate("Hola, ¿Cómo está?", "es", "en")' to translate the Spanish into "Hi, how are you?"

In Google Sites, add the Translate element to harness the power of Google Translate on your site. Allow visitors to translate your pages into their preferred language with a single click.

#### **4.0.2.11 SECURITY**

##### **4.02.11.1 (M) Meets FISMA Moderate Level Certification.**

"Supported"- Obtaining Federal Information Security Management Act (FISMA) certification & accreditation for Google Apps is critical to our US federal government customers, who must comply with FISMA by law. All customers, both public and private sector, benefit from this governmental review and certification of our security controls. Google is the first in the industry to complete FISMA certification for a multi-tenant cloud application. Google Apps has received an authority to operate at the FISMA-Moderate level; an independent auditor assessed the level of operational risk as Low. Google's FISMA documentation is available for review by interested agencies. This enables agencies to compare the security of Google Apps to that of existing systems.

The FISMA law applies to all information systems in use by U.S. federal government agencies to help ensure they're secure. The federal government's General Services Administration has reviewed the documentation of our security controls and issued an authorization to operate, the official confirmation of our FISMA Moderate Level certification and accreditation. This review makes it easier for federal agencies to compare our security features to those of their existing systems; most agencies we have worked with have found that Google Apps provides at least equivalent, if not better, security than they have today. This means government customers can move to the cloud with confidence.

Google Apps for Government provides segregated systems for our US government customers. Government customer data is stored in the US only. This "community cloud", as defined by the National Institute of Standards and Technology, is available now to any federal, state or local government in the United States.

##### **4.02.11.2 (M) Provide and describe the physical security controls for each Respondent data center and for equipment within the associated data centers.**

"Supported"- The following is a general description of Google's various data center environments and efforts to ensure physical security in these environments.

##### **Physical Security Staffing**

Google maintains a security organization responsible for all data center security functions 24 hours a day, 7 days a week. The security organization monitors Closed Circuit TV (CCTV) cameras and all alarm systems. Internal and external patrols of the data center are performed regularly. The data centers are housed in facilities that require electronic key access, with alarms that are linked to guard stations or Google's main physical security center.

**Physical Security Devices**

Data centers employ electronic card key access control system that are linked to a system alarm. Access to perimeter doors, shipping and receiving, and other critical areas is logged, including unauthorized activity. Failed access attempts are logged by the access control system and investigated as appropriate. Authorized access throughout the business operations and data centers is restricted based on an individual's job responsibilities. The fire doors at the data centers are alarmed and can only be opened from the inside. CCTV cameras are in operation both inside and outside the data centers. The positioning of the cameras has been designed to help cover strategic areas including, among others, the perimeter, doors to the data center building, and shipping/receiving. Security operations personnel manage the CCTV monitoring, recording and control equipment. Cameras record on site via digital video recorders 24 hours a day, 7 days a week. The surveillance records are retained for up to 90 days based on activity. The following environmental controls are incorporated into the design of each of Google's data centers:

- Internal and remote temperature and humidity control and monitoring
- Smoke detection alarm
- Transient voltage surge suppression and grounding
- Redundant and backup power systems
- Water redundancy or local water reservoirs (for cooling)

**Environmental Safeguards****Redundancy**

Google's data centers are designed for resiliency and redundancy. The redundancy is intended to minimize the impact of common equipment failures and environmental risks. Infrastructure systems have been designed to eliminate single points of failure. Dual circuits, switches, networks or other necessary devices help provide this redundancy. Critical facilities infrastructure at the data centers have been designed to be robust, fault tolerant and concurrently maintainable. Preventative and corrective maintenance is designed to be performed without interruption of services. Environmental equipment and facilities have documented preventative maintenance procedures that detail the procedure and frequency of performance in accordance with the manufacturer's or internal specifications. Preventative and corrective maintenance of the Google data center equipment is scheduled through a standard change process.

**Power**

The data center electrical power systems are designed to be redundant and maintainable without impact to continuous operations, 24 hours a day, and 7 days a week. In some cases, a primary as well as an alternate power source, is provided for every critical infrastructure component in the data center. This redundancy begins with dual utility power feeds, primary and alternate, to parallel utility switchboards sized so that any one can provide power to the entire facility. The output power is routed to supply building loads including uninterruptible power supplies (UPS), building and mechanical services, and heating, ventilation and air conditioning systems.

Backup power is provided by various mechanisms including, but not limited to UPS batteries. Backup power is designed to supply consistently reliable power protection during utility brownouts, blackouts, over voltage, under voltage, and out-of-tolerance frequency conditions. If utility power is interrupted for any reason, backup power is designed to provide transitory power until the diesel generator systems take over. In the event of unavailability of both electrical utility



and diesel generators, backup power can provide emergency electrical power to run the data center at full capacity for up to 10 minutes.

Diesel engine generators are in place to provide power to critical equipment and customer loads. The generators are capable of providing enough emergency electrical power to run the data center at full capacity typically for a period of days. These generators automatically startup and are able to provide power within seconds in the event of a power outage.

#### **4.0.2.11.3 (M) Disclose physical data center locations that will be used for State data to meet external audit requirements.**

"Not Supported"- Google does not release the physical locations of its data centers. This should, in fact, make every Google customer feel more confident in the extensive Google security model, which incorporates both logical and physical security parameters. Even Google personnel are not allowed into Google data centers without specific clearance and a defined objective for the visit. Google data centers have armed guards stationed on the premises, and have the most sophisticated organizational and technological security attached to them.

To meet audit requirements, Google restricts your data storage to the continental U.S., and data is encrypted at rest in the Google Apps for Government environment.

#### **4.0.2.11.4 (M) Ability for the state to perform onsite audits of respondent data center hosting facilities to ensure security compliance.**

"Not Supported"- As physical client access to Google data centers is unnecessary and against Google's active Security Policy. The FISMA certification and other certifications (e.g. SAS 70 Type I and II) are meant to make sure that Google and their data centers adhere to suitable security policies. The Federal government, including intelligence agencies, are testing and licensing Google Apps for use, and the extensive certifications received by Google are the linchpin of these evaluations and subsequent ongoing use. Google went to significant expense and allocation of engineering and other resources over the past year to complete the FISMA certification so that entities like the State do not need to perform individual visits or extensive due diligence in this area.

#### **4.0.2.11.5 (M) Provide and describe the logical security controls for each Respondent data centers and for equipment within the associated data centers.**

"Supported"- Google applications run in a multi-tenant, distributed environment. This means that rather than segregating each customer's data onto a single machine or set of machines, data from all Google customers (consumers, business, and even Google's own data) is distributed amongst a shared infrastructure composed of tens of thousands of homogeneous machines.

Data is then stored in a large distributed database. Data is chunked and replicated over multiple systems, so that no one system is a single point of failure. There are "virtual" firewalls protecting one users from another user's data. A user has to authenticate to unlock their access to their data.

More information on security in Google Apps is available here:

[http://googleenterprise.blogspot.com/2010/06/security-first-protecting-your-data\\_04.html](http://googleenterprise.blogspot.com/2010/06/security-first-protecting-your-data_04.html)



[http://www.google.com/a/help/intl/en/admins/pdf/ds\\_gsa\\_apps\\_whitepaper\\_0207.pdf](http://www.google.com/a/help/intl/en/admins/pdf/ds_gsa_apps_whitepaper_0207.pdf)  
[http://www.google.com/apps/intl/en/business/infrastructure\\_security.html](http://www.google.com/apps/intl/en/business/infrastructure_security.html)

#### **4.02.11.6 (M) Indicate the methodology and frequency in which you audit your physical and logical security.**

"Supported"- Google conducts third party security penetration tests and can share those results with the client, if the client is willing to travel to Mountain View, CA to view those reports in person. Google uses a number of well-known third-party tools to scan its external perimeter on a quarterly basis for network vulnerabilities and configuration errors. Additionally these tools are used internally on systems containing highly sensitive information. Google also undergoes yearly third-party penetration tests, performed by a qualified vendor, for both its external networks and financial-related applications.

Google has obtained SAS 70 Type II audit for the Google Apps. Google typically hires an external auditor every year to review the confidentiality, integrity and availability controls that are in place for Google Apps. A copy of the report can be made available for the client to review. This means that an independent auditor has examined the controls protecting the data in Google Apps (including logical security, privacy, Data Center security, etc) and provided assurance that these controls are in place and operating effectively. In addition, Google has received FISMA Certification at the Moderate Level.

More information on security in Google Apps is available here:

[http://googleenterprise.blogspot.com/2010/06/security-first-protecting-your-data\\_04.html](http://googleenterprise.blogspot.com/2010/06/security-first-protecting-your-data_04.html)  
[http://www.google.com/a/help/intl/en/admins/pdf/ds\\_gsa\\_apps\\_whitepaper\\_0207.pdf](http://www.google.com/a/help/intl/en/admins/pdf/ds_gsa_apps_whitepaper_0207.pdf)  
[http://www.google.com/apps/intl/en/business/infrastructure\\_security.html](http://www.google.com/apps/intl/en/business/infrastructure_security.html)

#### **4.02.11.7 (M) Ability to provide accessibility and security of email records during their entire storage period with the hosted environment.**

"Supported"- The Message Discovery application supports various roles which can be described as:

- Auditor: Reviews the search and export activity of investigators. Data cannot be retrieved from the data store without triggering an audit log entry.
- Investigator: Queries the archive and reviews/exports data, saves search criteria and results and manages collections of data called "investigations".
- System Administrator: Manages the user registration and enables/disables archiving for groups of users. (No visibility to user data)
- User: searches for messages which they have personally sent or received. (Visibility to only their personal messages)

To access Message Archiving, you must have a user account on your Message Security service with at least one of the following privileges in your authorization record:

The Archive Search privilege, which gives you access to:

- The Search tab (all editions) to search for, view, and export messages in your corporate archive.
- The Reports tab to run the Storage reports.
- Archive Search is also required to enable the Archive Discovery privilege.



The Archive Discovery privilege, which gives you access to:

- The Discovery tab: The Discovery tab provides all the functionality of the Search tab, and also lets you manage investigations of your archive. With investigations you can save search criteria and results, set retentions periods for search results, and export search results to MBOX and PST files.
- The Storage reports on the Reports tab.
- Archive Discovery requires that you also have Archive Search.

The Archive Retention privilege, which gives you access to:

- The Retention tab to purge messages from the archive.
- The Purge History report on the Reports tab.

The Archive Audit privilege, which gives you access to the audit reports on the Reports tab.

- The Archive Investigator Security privilege, which gives you access to the
- Admin tab and the ability to restrict searches.

#### **4.02.11.8 (M) Password policy enforcement by groups or domains.**

"Supported"- Google Apps provides administrators with password policy controls. In general, administrators choose to utilize their existing infrastructure and integrate Google Apps with existing Directory Services (e.g. LDAP, Active Directory, etc.) and Single-Sign-On systems supporting the SAML protocol. This enables administrators to maintain their existing password enforcement policies. The Google Apps Directory Sync tool can be used to synchronize all user account information, including passwords, between an existing LDAP services and Google Apps.

#### **4.02.11.9 (M) Provide your background vetting process for employees and contractors.**

"Supported"- Google Apps has received authority to operate at the FISMA-Moderate level; an independent auditor assessed the level of operational risk as Low. This certification provides controls for background checks that meet the Federal Government's stringent standards.

Google employees are required to conduct themselves in a manner consistent with the company's guidelines regarding confidentiality, business ethics, appropriate usage, and professional standards. Where local labor law or statutory regulations permit, Google may conduct criminal, credit, and/or security checks on all potential employees. At a minimum, these practices include verification of an individual's education and previous employment as well as a reference check. The specifics or extent of background checks performed is dependent on the position for which the individual is applying.

The full Google Code of Conduct is here:

<http://investor.google.com/corporate/code-of-conduct.html>

#### **4.02.11.10 (M) Describe any encryption capabilities provided including the support of transport layer security and at rest encryption.**

"Supported"- Google Apps for Government is protected by default via Hypertext Transfer Protocol Secure (HTTPS) for services such as Gmail, Docs, Calendar, Sites, etc.



With policy-enforced Transfer Layer Security (TLS) for Simple Mail Transfer Protocol (SMTP), administrators can set up policies designed for securely sending and receiving mail between specific domains. For example, an administrator could specify that all external mail sent by their accounting team members to their bank must be secured with TLS or deferred if TLS is not possible. Similarly, an administrator could mandate a secure TLS connection between their domain and their outside legal counsel, auditors, or any other partners with whom employees may trade sensitive communications.

In addition, Google Apps for Government supports secure email delivery via a Google Message Encryption. Data at rest is chunked and replicated over multiple systems. Data chunks are given random file names and are not stored in clear text so they are not humanly readable.

Although Google Apps is extremely secure by itself, after all Google utilizes it for their entire corporations' communications in addition to several federal agencies, Google Message Encryption provides an additional layer of data security. The Google Message Encryption service, powered by Postini, provides on-demand message encryption for your organization to securely communicate with business partners and customers according to security policy or on an "as needed" basis.

**The Google Message Encryption service enables:**

- Secure messaging between business partners, customers, or individuals without any additional software, hardware, or technical training
- Automatic enforcement of organizational email encryption policies based on individuals, groups, or specific message content
- User-initiated encryption for confidential messages to any email recipient
- Auditable protection of emails containing regulated or company proprietary information
- Centrally-managed security policies and reporting

**4.02.11.11 (M) Restrict visibility of documents to specific users or groups.**

"Supported"- You can share your docs with as many or as few people as you like -- and it's all under your control. But now, you can assign a visibility option to a doc in just one step. Google apps visibility options: Private, Anyone with the link, and Public on the web. You can see how your doc is set by looking at the icon right next to its title. All documents start out as private. When you create a private doc, you are the only person with access to it. And from there, you can grant access to other people. Anyone trying to access the document will have to sign in to their Google Account to verify that they have access to the doc.

**4.02.11.12 (M) Provide your standard operating procedures for the creation and administration of user accounts.**

"Supported"- Google follows a formal process to grant or revoke access to resources. LDAP (Lightweight Directory Access Protocol), Kerberos, and a Google proprietary system that utilizes RSA encryption keys provide secure and flexible account access mechanisms. These mechanisms help grant only approved access rights to systems and data. To help ensure appropriate account usage, Google requires the use of unique user IDs, strong passwords, and carefully monitored access lists for all employees.



Access to sensitive information in Google File System (GFS) is controlled through authorization and authentication technologies, ensuring that only those specifically authorized to view, update, or delete data can do so. This access must be approved by the appropriate data owner, manager, or other executives, as dictated by Google's security policies. Access rights and levels are based on the employee's job function and role, using the concepts of least-privilege and need-to-know to ensure that access is commensurate with defined responsibilities. Approvals are managed by workflow tools that maintain audit records of all changes.

Where passwords are employed for authentication (e.g., login to workstations), they must adhere to Google's standard password policies, including password expiration, restrictions on password reuse, and sufficient password strength.

Google's policy is to log administrative access to every Google production system. These logs are reviewed by Google security staff on an as-needed basis.

**4.02.11.13 (M) What is your standard operating procedure for new hire and termination of your employees with regard to physical and logical security.**

"Supported" - Google follows a formal process for both the hiring and termination of all personnel.

Google employees are required to conduct themselves in a manner consistent with the company's guidelines regarding confidentiality, business ethics, appropriate usage, and professional standards. Where local labor law or statutory regulations permit, Google may conduct criminal, credit, and/or security checks on all potential employees. At a minimum, these practices include verification of an individual's education and previous employment as well as a reference check. The specifics or extent of background checks performed is dependent on the position for which the individual is applying.

The full Google Code of Conduct is here:

<http://investor.google.com/corporate/code-of-conduct.html>

**4.02.11.14 (M) Provide your standard operating procedure for allowing authorized customer representatives and/or agents access to the data center facility.**

"Not supported" - as physical client access to Google data centers is unnecessary and against Google's active Security Policy. Functionally, Google Apps is architected so that physical access to any Data Center is not required for any management task. The redundancy, scalability and service model of Google infrastructure makes this completely unnecessary. Google Apps and Google's security and compliance products provide secure, web-based administrative interfaces which enable management functions. Furthermore, Google tools and secure APIs are available to automate a wide range of administrative tasks.

Google takes Data Center security very seriously and physical access to Google facilities by non-Google outside personnel is kept to an absolute minimum; in the Government sector alone, there are hundreds of customers using Google apps, and hundreds of thousands of government employees.

For further information on Google's security infrastructure, see

[http://www.google.com/apps/intl/en/business/infrastructure\\_security.html](http://www.google.com/apps/intl/en/business/infrastructure_security.html)

**4.02.11.15 (M) Provide your standard operating procedure for allowing authorized customer representatives and/or agents remote access to the computing facilities.**

"Not supported"- Remote access to facilities is tightly controlled as well. Google, and Google Apps, are not like Facebook or a social networking site. The data that lives in Google Apps, in the data centers, is your data, and the information is protected to the utmost. Access to actual customer data is restricted. Google employees who work in the data centers have different access rights while on-premise versus being remote. In no way does Google expose customer data to external entities, nor does it allow employees with no tangible and defined business need to access data. Engineers who work with systems and who can potentially access information are still governed by corporate policy (organizational control) and by system access control and security measures (technological control).

**4.02.11.16 (M) Multi-tenant environment restricted to government entities only.**

"Supported"- Google Apps for Government provides segregated systems for our US public sector customers only. Government customer data is stored in the US only. This "community cloud", as defined by the National Institute of Standards and Technology, is available now and restricted to federal, state and local governments in the United States.

**4.02.11.17 (M) Explain any security risks associated with a multi-tenant server model and provide potential mitigation strategies.**

"Supported"- Google applications run in a multi-tenant, distributed environment. This means that rather than segregating each customer's data onto a single machine or set of machines, data from all Google government customers is distributed amongst a shared infrastructure composed of tens of thousands of homogeneous machines. Data is then stored in a large distributed database. Data is chunked and replicated over multiple systems, so that no one system is a single point of failure. There are "virtual" firewalls protecting one users from another user's data. A user has to authenticate to unlock their access to their data. Data from one domain is not available via another domain. Google believes its security model is much more secure than tradition, on-premise based systems for these reasons.

More information on security in Google Apps is available here:

[http://googleenterprise.blogspot.com/2010/06/security-first-protecting-your-data\\_04.html](http://googleenterprise.blogspot.com/2010/06/security-first-protecting-your-data_04.html)

[http://www.google.com/a/help/intl/en/admins/pdf/ds\\_gsa\\_apps\\_whitepaper\\_0207.pdf](http://www.google.com/a/help/intl/en/admins/pdf/ds_gsa_apps_whitepaper_0207.pdf)

[http://www.google.com/apps/intl/en/business/infrastructure\\_security.html](http://www.google.com/apps/intl/en/business/infrastructure_security.html)

**4.02.11.18 (M) Explain the steps needed, and costs associated, with allowing applications to utilize email services.**

"Supported"- Applications can send or receive email using standard POP3 or IMAP access to a Gmail account without any additional costs. Beyond this, Google Apps has a very extensive API set. There are both 3rd party applications pre-integrated (see the Google Apps Marketplace) as well as the ability to custom write applications within your organization. Please see the following URL for additional information: <http://code.google.com/googleapps/>





**4.02.11.19 (M) Provide and describe spam, virus and Message Transfer Agent capabilities including capabilities for DoS protection, dictionary harvest protection, fraud protection, quarantine provisioning, content filtering, inbound email filtering services, and outbound filtering services.**

"Supported"- Google/Postini's managed email security service provides Email Threat Prevention, Email Compliance and Email Management functionality.

**Threat Prevention**

As a pre-emptive email security service that sits between the Internet and our customer's email gateway, Postini prevents email threats from ever reaching your network. Postini is a recognized leader in effectively stopping spam, phishing, viruses, directory harvest attacks and other email threats through its patented, multi-layer technology. No other vendor provides such wide scope and in-depth protection from email intrusions.

**Anti-Spam**

Google Message Security (powered by Postini) is proven to be one of the most effective solutions for eliminating spam.

**Anti-Virus**

Google/Postini consistently demonstrates superior anti-virus capabilities, blocking billions virus infected emails every year. Google/Postini's multi-layer antivirus protection coupled with its patented preEMPT technology protects your email system from the initial outbreak of a virus---its zero hour---until an antiviral signature is available. Thus, Google/Postini prevents viruses from ever getting inside your network.

**Anti-Phishing**

Google/Postini blocks phishing attacks by applying several hundred spam filtering rules targeted specifically at phishing techniques. Google/Postini routinely blocks more than 400,000 phishing attempts each day.

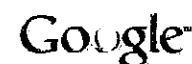
**DHA Prevention**

Directory harvest attacks not only "lead and fuel" spam attacks, they sap mail server performance and affect quality of service. Google/Postini's Connection Manager performs real time inspection of every IP address that connects to its service. Patented IP analysis based on more than two-dozen variables that determine if the "behavior" of the message exhibits the characteristics of a DHA, spam, or virus, enables Google/Postini to block connections without seeing the actual message. Processing more than 500 million inbound SMTP connections every day from 10 to 15 million distinct IP addresses, Google/Postini currently blocks more than half of SMTP connections and then applies rigorous content filtering for the balance of messages.

**Policy Compliance**

Google/Postini helps assure inbound and outbound content policy compliance concerning offensive language, preventing employees from sending proprietary content outside the organization, and prohibiting employees from using email for illegal and inappropriate purposes. Google/Postini supports encrypted email transmission, helps monitor employee communications, and preserves network bandwidth by limiting the size and type of attachments that are accepted.

**Legal & Regulatory**



Postini's outbound email functionality enables the administrator to automatically block, reroute or copy email matching certain criteria. For example, the enterprise can retain copies of all mail sent by professionals covered by industry regulations, or containing key phrases. To meet regulatory requirements that require retention of all email communications, Postini also offers a 'compliance switch' to assure that any quarantined emails cannot be read by the user unless they are first accepted by the user into the customer's archiving system. Because Postini does not use a 'store and forward' approach typical of other service providers, its patented pass-through process eliminates any performance penalty or security and privacy concerns.

### **Content Filtering**

Postini's email security managed service provides both inbound and outbound email policy enforcement capabilities. Outbound email filtering by Postini enables organizations to scan outbound messages for viruses and apply content policies, protecting both customers and partners and ensuring that corporate policies regarding appropriate use are observed. Inbound anti-virus scanning prevents viruses from entering a corporate network through the gateway. Outbound anti-virus scanning prevents the spread of viruses to customers and partners. Outbound content filtering also prevents confidential or sensitive data from leaving the enterprise network and entering the hands of competitors.

### **Attachment Filtering**

While inbound attachment management reduces the resources required to process unwanted attachments (such as large MP3 music files), outbound attachment filtering can be used to prevent sensitive or confidential file types from leaving the enterprise.

### **Email Management**

Postini helps improve email management through a convenient web console that provides real time monitoring and alerting, as well as comprehensive reporting for administrators. Users get the flexibility to access and examine quarantined emails within limits set by administrators. Email system availability and uptime are enhanced with load balancing and business continuity assured through disaster recovery capabilities.

### **Disaster Recovery**

Postini provides disaster recovery and business continuity measures to ensure maximum availability of the enterprise's email system. In the event of a customer server outage, Postini will spool emails until the customer's email servers come back online and messages can be delivered. Spooling ensures that no messages are lost or bounced back to senders.

### **Monitoring & Alerting**

Postini delivers control and visibility over the entire enterprise email system, not just a single server or single geographic location. Real-time dashboard monitoring and alerting from a Web-based console provides continuous control and insight into all email traffic into and out of the enterprise.

### **Load Balancing**

Postini ensures the smooth delivery of email to your systems by load balancing traffic across specified email servers. This helps administrators handle traffic spikes and improve the availability and reliability of all email servers.

### **Comprehensive Reporting**

Through a single web management interface, an email administrator can monitor all email flow and traffic conditions, and view reports from anywhere. Dozens of summary and detailed reports



of email activity are instantly available, enabling you to fine-tune rules and filters for domains, user groups and individual users.

#### **Centralized Administration Console**

All aspects of the Postini service can be controlled from the centralized administration console which is accessed via a web browser. Key aspects of the console are:

Full control- administrators have full control over their own environment. Unlike other service providers, administrators do not have to submit change requests to Postini to make changes such as adding new email servers, changing failover servers, modifying Black and White Lists etc.

Granular Delegation of authority- the super administrator can define additional administrators and grant them one or more of 53 access control permissions, e.g. the ability to review end user quarantines, the ability to add new users, etc. Furthermore, the super administrator can determine which groups of users or individual users the sub-administrator is able to administer with the granted privileges

Postini's proprietary mail transfer agent (MTA) is designed to proxy the SMTP session between the sender and recipient. As such, it must do all of its processing during the window which the sender and receiver maintain with each other. This advanced technology is responsible for its low latency. Since the SMTP session is dependent on the Internet for the end-to-end delivery time, Postini does not add any statistically significant delay. For example, the spam filtering process takes 7ms regardless of message size. Virus scanning may take longer based on the size of the message and its attachments. Total processing time ranges between 30-40 milliseconds.

#### **4.02.11.20 (DR) Provide and describe your vulnerability identification and mediation process.**

"Supported"- The Google Security Team actively scans for security threats using commercial tools, intensive automated and manual penetration efforts, quality assurance (QA) processes, software security reviews, and external audits. Google's Vulnerability Management team monitors mailing lists, vendor errata notices, blogs, etc to identify when new security vulnerabilities and fixes are necessary. They also ensure that appropriate administrators are applying security fixes to their systems and have the resources they need to do so.

Google employs a number of approaches to further reduce the incidence of implementation-level security vulnerabilities in its products and services:

- Implementation-level security reviews: Conducted by members of the Google Security Team, typically in later stages of product development, implementation-level security reviews aim to validate that a software artifact has indeed been developed to be robust against relevant security threats. Such reviews typically consist of a re-evaluation of threats and countermeasures identified during security design review, targeted security reviews of security-critical code, selective code reviews to assess code quality from a security perspective, and targeted security testing.
- Automated testing for flaws in certain relevant vulnerability classes. We use both in-house developed tools and some commercially available tools for this testing.
- Security testing performed by Software Quality Engineers in the context of the project's overall software quality assessment and testing efforts.



- Google maintains relationships and interfaces with members of the security research community to track reported issues in Google services and open source tools. More information about reporting security issues can be found at <http://www.google.com/intl/en/corporate/security.html>

For more information on Google security, please see our Google Apps Security Whitepaper at the below URL:

[http://docs.google.com/viewer?url=www.google.com%2Fa%2Fhelp%2Fintl%2Fen%2Fadmins%2Fpdf%2Fds\\_gsa\\_apps\\_whitepaper\\_0207.pdf](http://docs.google.com/viewer?url=www.google.com%2Fa%2Fhelp%2Fintl%2Fen%2Fadmins%2Fpdf%2Fds_gsa_apps_whitepaper_0207.pdf)

#### **4.02.11.21 (DR) Provide and describe your logging process including the types of services and devices logged; the event types logged; and the information fields.**

"Supported"- As the message security service processes your messages, data about these messages is captured and stored in a log. The Message Log Search feature enables you to run searches on this data using different criteria. You can then view the search results and drill down to details about specific messages.

Use Message Log Search to track messages for inbound and outbound traffic, and to track all messages for a specific sender, recipient, domain, or MTA address. You can also use Message Log Search to confirm whether a specific filter was triggered by a message and confirm the disposition. If necessary, you can later analyze filter settings that may be affecting traffic.

Additionally, if you implement a SSO solution additional data will be available.

#### **4.02.11.22 (DR) Explain the steps needed, and costs associated, with enabling converged communication capabilities (for example, integrating presence into email or routing voice mail to email).**

"Supported"- Unified Communications are available through third party solutions that can be found in the Google Apps Marketplace. The costs will vary and are dependent on the specific solution selected.

Some third party solutions provide enterprises with enhanced access and control over communications with features such as multilingual speech-enabled auto attendant, unified messaging, mobility, fax mail and presence management support. These optional solutions offer a myriad of options for enterprise users to retrieve and manage all their business communications. The solution can support both an organizations existing telephone environment or a new IP based telephony solution, and are designed to interface with a range of messaging systems (including Octel) using industry standard networking protocols (VPIM, IMAP and AMIS). For more information on possible third party solutions, please see the Google Apps Marketplace (<http://www.google.com/enterprise/marketplace/>).

Unified Communication is available through a 3rd party solution such as Esnatech (<http://www.esnatech.com/index.html>). Esnatech's Communication platform provides enterprises with enhanced access and control over communications.

Through features such as multilingual speech-enabled auto attendant, unified messaging, mobility, fax mail and presence management support, the Esnatech platforms offer a myriad of options for enterprise users to retrieve and manage all their business communications. Fully



supporting both an organization's existing telephone environment or a new IP based telephony solution, the Esnatech platforms are designed to interface with a range of messaging systems (including Octel) using industry standard networking protocols (VPIM, IMAP and AMIS).

#### **4.0.2.11.23 (DR) Compliance with HIPAA Security Rule, 45CFR Par 160 and sub parts A and C of Part 164, including filtering of email records to ensure that HIPAA protected information is not sent through the email system.**

"Supported"- "HIPAA 45CFR Part 160 Subpart C - Compliance,

§ 160.310 Responsibilities of covered entities

(a) Provide records and compliance reports"

- Google Apps provides audit API's which allow the state to report on user logins and institute email monitors; Google Message Security supports State implementation of content rules to identify emails containing individually identifiable health information; SSN matching templates are included.

"(c) Permit access to information"

- Google Apps audit API's and Google Message Security content rule matches are available according to the terms of the Google Apps for Government SLA

"HIPAA 45CFR Part 164 Subpart A - General Provisions,

§ 164.105 Organizational requirements

(ii) Safeguard requirements"

- Google Message Security supports State implementation of content rules to quarantine emails containing individually identifiable health information; SSN matching templates are included.

"HIPAA 45CFR Part 164 Subpart C - Security Standards for the Protection of Electronic Protected Health Information

§ 164.306 Security standards: General rules.

(a) General requirements. Covered entities must do the following:

(1) Ensure the confidentiality, integrity, and availability of all electronic protected health information the covered entity creates, receives, maintains, or transmits."

- Google Message Security supports State implementation of content rules to quarantine emails containing individually identifiable health information; SSN matching templates are included.

#### **4.0.2.11.24 (DR) Compliance with PCI-DSS 1.2.1 and projected compliance with PCS-DSS 2.0 effective January 2011)**

"Supported"- Google Message Security supports State implementation of content rules to quarantine emails containing PANs and/or CAV2/CVC2/CVV2/CIDs or PIN/PIN Blocks; credit card number matching templates are included.

In combination with PCI-DSS 2.0 requirement 1.3.3, which requires that organization's with cardholder data not allow any direct connections inbound or outbound for traffic between the Internet and the cardholder data environment, this help ensure that cardholder data isn't stored in the Google Apps environment.

In addition, Google Apps for Government supports many of the underlying security principles of PCI:



- Build and maintain a secure network
- Encrypt transmission of data across open, public networks
- Implement strong access control measures
- Regularly monitor and test networks
- Maintain an information security policy

For more information on Google Apps security and privacy policies, see <http://www.google.com/support/a/bin/answer.py?hl=en&answer=60762>

#### **4.0.2.11.25 (DR) Compliance with PHI 45CFR 160.103 and Section 13400 of Subtitle D (Privacy) of the Hitech Act provisions of ARRA of 2009.**

"Supported"- These sections contain definitions of terms, and do not appear to require any particular organization actions for compliance.

Information stored in Google is protected similar to information stored on your own storage infrastructure, in addition to the fact that Google encrypts the information at rest and ensures that employees and other entities have no access to it (as the State would do in any case). The State will need to ensure, through Google Message Security filter definitions, and/or through other policies, that no HIPAA information is sent via email. Message filters can be set up to look for any sort of data string, recognizable data format (e.g. Social Security number, credit card number, etc.) and the State would have a number of different actions which it can take when these filters intercept a message with the offending actions.

#### **4.0.2.12 PERFORMANCE MEASURES**

##### **4.0.2.12.1 (M) Ability to guarantee reliability and uptime greater than 99.9%. Additional points will be awarded for 99.99% or greater availability.**

"Supported"- Google's uptime service-level agreement is 99.9% calculated monthly. Penalties are imposed in the form of service credits as follows:

- < 99.9% - <sup>3</sup> 99.0% Monthly Uptime Percentage --> 3 days of service credited
- < 99.0% - <sup>3</sup> 95.0% Monthly Uptime Percentage --> 7 days of service credited
- < 95.0% Monthly Uptime Percentage --> 15 days of service credited

Actual uptime is 99.98%

The most up-to-date and detailed description of the SLA are available at <http://www.google.com/apps/intl/en/terms/sla.html>

##### **4.0.2.12.2 (M) Provide the uptime service and related Service Level Agreement (SLA) criteria.**

"Supported"- Google's uptime service-level agreement is 99.9% calculated monthly. Penalties are imposed in the form of service credits as follows:

- < 99.9% - <sup>3</sup> ≥ 99.0% Monthly Uptime Percentage --> 3 days of service credited
- < 99.0% - <sup>3</sup> ≥ 95.0% Monthly Uptime Percentage --> 7 days of service credited
- < 95.0% Monthly Uptime Percentage --> 15 days of service credited

The most up-to-date and detailed description of the SLA is available at <http://www.google.com/apps/intl/en/terms/sla.html>



#### **4.0.2.12.3 (M) Specify and provide the process to be used for the State to call the Respondent for support, who will be providing the support, and describe the basis of availability.**

"Supported"- Level one end-user support will be provided by the customer. Onix will provide Level 2 support for customer's named IT organization. As described in this section, Severity 1/Service Unavailable issues may be phoned directly to Google 24X7X365. For other issues, customer should enter in a support ticket through the Support tab in the Google Apps administrator control panel. Customer may contact Onix by email or phone for assistance or guidance with these issues. However, Google will own all "break/fix" conditions that are code issues and which require Google engineering to address. Onix professional services personnel monitor all inbound support requests from customers. Phone support for non-Severity1/Service Unavailable issues is available during Onix's normal business hours, from 9 a.m. – 5:30 p.m. EST. Onix personnel monitor email communications and support requests from customers at all times and can provide guidance on issues as needed.

To be clear – as a reseller of Google Apps for Government, Onix does not own the underlying code base for Google Apps. Any issues which result in a Google Apps service being unavailable to you will be handled by Google, via a 24X7 phone line for Severity1 issues. If issues are not "Severity1/Service Unavailable" then Onix has a process to help you. Generally, a short discuss will lead us to note whether or not the issue is a code issue, and we can instruct you to a) enter a Support Ticket with Google, b) solve the problem over the phone, or c) we can direct you to the solution for the problem in online forums.

The Google Apps Help Center (<http://www.google.com/support/a/users/?hl=en>) contains answers to most commonly asked end-user questions for doing some self-help. For the large majority of questions, chances are that someone else has asked it and that Google has an answer appropriate for your end users, minimizing the need for them to contact the help desk. Google continuously updates these FAQs as new features are released. End users can also search or post questions on the Help Forum because our user discussion group is very active and moderated by Google employees. Information is searchable and categorized by topic so end users can easily find others who share your same interests.

Google Apps for Government customers have access to a phone line to report a service unusable issue. We define 'unusable' as a Google server error that prevents one or more users from accessing a Google Apps online service. The hours of operation are Sunday 5PM PST until Friday 5PM PST. All other issues will be efficiently supported via email or with online help. If you have a service unusable issue to report, visit the Support tab in your control panel for contact options, including phone and email. If you have an issue that isn't service unusable, the Google Apps Help Center contains answer to most commonly asked questions and saves you the trouble to wait for a reply from Google Support. Whatever your question, chances are that someone else has asked it and that we've got an answer for you in our help centers, enabling you to quickly get back to the task at hand. We continuously update these FAQs as we release new features. You can also search or post questions on the Admin Help Forum because our user discussion group is a great way to share best practices and optimization tips with other users. Information is searchable and categorized by topic so you can easily find users who share your same interests. If you're unable to access your control panel, please visit the password reset instructions to gain access to your account.

#### **4.0.2.12.4 (M) Describe the consequences if the Respondent fails to meet incident response time and incident fix time.**

"Supported"- Google Apps offers the following incident levels in the Enterprise Support Portal:

\* P1 — VERY HIGH IMPACT - Product/Service Unusable in Production. Examples:

- Customer losing substantial business, revenue or customers
- Production from mission critical solution halted
- Large pool of resources idled
- Unable to meet business commitments on a large scale
- Threats of litigation, negative press or publicity
- Regulatory compliance in jeopardy
- Senior executives directly engaged in support requests

\* P2 – HIGH IMPACT - Use of Product/Service Severely Impaired. Examples:

- Significant feature or function degraded
- Project halted pending resolution
- Tedious manual workarounds required to sustain operations

\* P3 – MEDIUM IMPACT - Use of Product/Service Partially Impaired. Examples:

- Feature or function not working as expected
- User or users affected but able to perform role

Google offers a support SLA with respect to the first response time for an incident. P1 Priority support Requests are responded to with a target initial response time of one hour and are responded to 24 x 7. If contact is made for a P1 Priority support Request on a weekend or applicable holiday, a phone call is needed to trigger a return support response. P2 & P3 Priority support Requests are responded to during business hours of the location to which the Requests are assigned. P2 Priority support Requests will be responded to with an initial target response time of 1 business day or less. More information available at <http://www.google.com/apps/intl/en/terms/tssg.html>

Failure to meet incident response times, is covered in Google's TSS Guidelines. Any failure to meet the guidelines regarding incident responses would be a breach of the agreement.

#### **4.0.2.12.5 (M) Describe the procedures and schedules for any planned downtime.**

"Supported"- There will be no more than twelve hours of planned / scheduled downtime per calendar year. Customers would be notified of planned / scheduled downtime at least five days prior to the commencement of such downtime. Since August 2008, Google Apps uptime has been 99.98% with no (e.g. zero minutes) of scheduled downtime. All service interruptions and current service availability are published publicly at <http://www.google.com/appsstatus>

The most up-to-date and detailed description of the SLA are available at <http://www.google.com/apps/intl/en/terms/sla.html>

#### **4.0.2.12.6 (M) Describe the consequences if disaster recovery metrics are not met.**





"Supported"- If there are requirements that are in a contractual agreement and Google fails to meet those requirements, then Google would be in breach of the agreement.

#### **4.0.2.12.7 (M) Describe any known inherent disaster recovery risks and provide potential mitigation strategies.**

"Supported"- There are no inherent disaster recovery risks above and beyond those typical to any data center. Google has many mitigation strategies in place for disaster recovery. Google has real-time replication of data across geographically disparate data centers. Google maintains a number of geographically distributed data centers across the US and abroad. Google will store data in physically secure datacenters, maintain data on Google-owned servers, and replicate Apps data across multiple systems within a single data center as well as back up data in a Google-owned secondary data center. The secondary data center will be in a different geographic disaster area from the first. The client's data will reside in at least two Google data centers. These data center will be in different geographic disaster zones. Our Data Centers are redundant and can shift to a users their secondary data center. To minimize service interruption due to hardware failure, natural disaster, or other catastrophe, Google has implemented a comprehensive disaster recovery program at all of its data centers. This program includes multiple components to eliminate single point-of-failure, including the following:

- **Distributed data center architecture** Google operates a geographically distributed set of data centers ensure swift failover. Management of the data centers is also distributed to provide location-independent, around-the-clock coverage, and system administration.
- **Data replication and backup** To help ensure availability in the event of a disaster, all of the client's data is replicated to separate systems in different data centers. If a disaster occurred that effected one data center, the client's data will be served from the secondary data center. The data between a user's primary data center and their secondary data center is constantly replicated in "real time". There is nothing that the client or a client employee needs to do to act upon to invoke this. Google has built monitoring tools that help look for a malfunction or even slowness in a data center and automatically, push users to their secondary data center. The only requirement is that client still have internet access.

In addition to the redundancy of data and no single point of failure model for our data centers, Google also has a business continuity plan for their corporate office in Mountain View, CA. They have a plan that accounts for having suffered a major calamity, and people and services are unavailable for 30+ days. This plan insures continued operations or our services to our customers.

#### **4.0.2.12.8 (M) Describe any SLAs addressing key application functions such as time for user login.**

"Supported"- Google Apps is covered by a 99.9% uptime Service Level Agreement for the core Google Apps services including Gmail, Google Calendar, Google Talk, Google Docs, Google Groups and Google Sites. The Google Apps SLA covers the operation and availability of the web interfaces for these services. The Customer retains responsibility over the operation and availability of any non-Google services on which Google Apps may depend.

#### **4.0.2.12.9 (M) Describe the deleted item recovery capabilities and specify the**



#### **time period for deleted item recovery.**

"Supported"- Items deleted by an end user are moved to the trash and recoverable by the end user without admin intervention for 30 days. End users would recover these messages by simply dragging and dropping or clicking a button to move them out of the trash.

For situations in which the end user "empties" items from the trash, those items would not be recoverable by the end user. However, in conjunction with Google Message Discovery, those messages could be recovered by a client-side administrator for up to 10 years.

#### **4.0.2.12.10 (M) Describe the procedure for mailbox/message recovery.**

"Supported"- Items deleted by an end user are moved to the trash and recoverable by the end user without admin intervention for 30 days. End users would recover these messages by simply dragging and dropping or clicking a button to move them out of the trash. There is no additional cost for this capability.

For situations in which the end user "empties" items from the trash, those items would not be recoverable by the end user. However, in conjunction with Google Message Discovery (GMD), those messages could be recovered by a client-side administrator for up to 10 years. The cost for GMD is listed elsewhere in this response.

Mailboxes can only be deleted by the client-side Google Apps administrator or via a programmatic API call (typically used during LDAP directory synchronization). If a deletion somehow occurs inadvertently, the client can raise a support ticket or contact their Technical Account Manager (TAM) to recover the mailbox. While Google does not guarantee that the mailbox can be recovered, it is generally possible to recover a mailbox if Google's support team attempts to do so within 3 days of the deletion.

#### **4.0.2.12.11 (M) Clarify the default recovery point objective and recovery time objective disaster recovery metrics.**

"Supported"- Through synchronous replication, data and user actions in Google Apps are mirrored in nearly real-time across multiple data centers. If one data center becomes unavailable for any reason, the system is designed to instantly fall back to a secondary data center with no user-visible interruption in service. For Google Apps customers, our recovery point objective (RPO) design target is zero, and our recovery time objective (RTO) design target is instant failover. Gmail, Google Calendar, Google Talk, Google Groups, Google Docs and Google Sites have a 99.9% uptime guarantee, and our actual reliability has been significantly higher than this commitment. Attempting to replicate this level of reliability with on-premises or hosted technology is tremendously costly and complex. Even very large enterprises with state-of-the-art disaster recovery systems typically target a recovery time of one hour and accept the loss of one hour's worth of data.

#### **4.0.2.12.12 (M) Describe the responsibility for and time required for adding/deleting/moving user mailboxes.**

"Supported"- Responsibility for adding and deleting user mailboxes lies with the client-side Google Apps administrator. Only Google Apps administrators, or a programmatic API call, can add or delete mailboxes in the client's domain. Adding a new mailbox via the Google Apps



administration panel is as simple as filling out a few fields such as first name, last name, username and password. Deleting a mailbox is also simple using the administration panel, and requires the administrator to select the mailbox to be deleted and to confirm that the particular mailbox is the one to be removed.

Adding and deleting of mailboxes can also be done automatically. With Google Apps Directory Sync (provided at no additional cost), you can automatically provision users, groups and non-employee contacts based on the user data in your LDAP server, such as Microsoft Active Directory or Lotus Domino. Google Apps Directory Sync connects to your Google Apps directory and adds/delete user accounts to match your existing organizational schema. The Google Apps Directory Sync configuration wizard guides you through customizing your synchronization and mapping of your LDAP user list to your Google Apps users, nicknames, shared contacts and groups. You can also synchronize rich user profile data like home/work/mobile phone numbers, addresses and job titles. To manage your synchronization, you can perform test synchronizations, and configure change limits, notifications, and scheduled synchronizations. Key benefits:

- Synchronizes your Google Apps user accounts to match user data in your LDAP server.
- Supports sophisticated rules for custom mapping of users, groups, non-employee contacts, rich user profiles, aliases, and exceptions.
- Performs a one-way synchronization. Data on your LDAP server is never updated or altered.
- Runs as utility in your server environment. No machine outside your perimeter accesses your LDAP directory server data.
- Includes extensive tests and simulations to ensure correct synchronization.
- Includes all necessary components in the installation package.

Moving mailboxes is not applicable within the Google environment as Google makes this transparent for the client.

#### **4.0.2.12.13 (M) Confirm the ability of the user to utilize Web Access and the Active Sync protocol for mobile devices.**

"Supported"- Google Apps is inherently web-based with robust support for ActiveSync for mobile devices. Google Sync lets your users synchronize their mail, contacts and calendars to their mobile devices. This means that your users will have access (viewing and editing) to their inbox, address books and calendar events at any time. They can also get alerts (sound or vibration) for upcoming meetings and incoming messages.

When you enable Google ActiveSync support for Mail, Calendar and Contacts, your users will be able to utilize it on any ActiveSync device such as the iPhone, the Ipad, Palm, Nokia and Windows Mobile ActiveSync-enabled devices.

#### **4.0.2.12.14 (M) Describe any human resources that will be dedicated to the state account, the duties of that individual(s) and provisions for regular communications.**

"Supported"- For customers such as The State of Utah, Google will provide a named Technical Account Manager (TAM) who will act as a central point of contact between The State's support organization and Google. The TAM will act as a named point of contact for the state for planning



and escalation purposes to represent you to Google for important topics (Engineering, Product, Management, and Support). The TAM will provide relevant information to you when available and address inquiries pertaining to the Services in use or planned for use. In addition to priority routing of support requests, the services provided by the TAM may include:

- Answer general queries and consultancy
- Case management and escalation
- SLA claims
- Service Management reviews and support reports (e.g. your use of the portal / Unify)
- Assist triage of FRs and bugs; feature request and bug tracking
- Advice for new / changed features and configurations; new / changed feature notification
- Transition from deployment team
- Weekly conference calls
- Account reviews and recommendations of best practices

Your TAM will provide notification of changes that they ascertain will impact the State's usage or satisfaction with Google Apps.

Onix Networking Corp. will also be dedicating an Account Manager, in addition to several engineers to the State's account. The resumes for these individuals can be found in Attachment C.

**4.0.2.12.15 (M) Provide a sample of performance reports and specify if they are available over the Web and if they are real-time statistics or batch statistics.**

"Supported"- There are four ways performance and utilization reports are surfaced to Google Apps administrators in real time and batch modes:

1) Google Apps Administration Control Panel provides Usage and Reports for log-in activity and utilization through a robust graphical interface. The accounts report contains a list of all of the hosted accounts that exist in your domain on a particular day. The report includes both active accounts and suspended accounts. The activity report identifies the total number of accounts in your domain as well as the number of active and idle accounts over several different time periods. In this report, activity encompasses user interaction with his email, such as reading or sending email. The disk space report shows the amount of disk space occupied by users' mailboxes. The report identifies the total number of accounts in your domain as well as the number of accounts that fall into several different size groupings. Mailboxes that occupy less than 1GB of disk space are grouped in increments of 100MB, and mailboxes that occupy between 1GB and 10GB of disk space are grouped in increments of 500MB. The email clients report explains how users in your domain access their hosted accounts on a day-by-day basis. For each day, the report lists the total number of accounts in your domain as well as the number and percentage of users who accessed their accounts using WebMail.

2) Customers can use the Google Apps Status Dashboard to check on the current service status of individual services such as Gmail, Google Calendar, Google Talk, Google Docs, Google Sites and Google Video for business. Administrators of Google Apps for their businesses, schools and organizations can also view the performance of the administrative control panel. The Google Apps Status Dashboard represents an additional layer of transparency that we believe will be particularly useful for our business users. The Status Dashboard is the best place to check for information on service availability for Google Apps anywhere in the world here: <http://www.google.com/appsstatus>



3) Google Analytics may be integrated with Google Apps at no charge to help you analyze traffic (visitor behavior) on your sites, documents, presentations and spreadsheets. Google also provides the free, unsupported Google Analytics tool to monitor performance and usage of the Google Docs and Google Sites products.

4) Lastly, Google Apps provides a robust reporting API. The Google Apps Reporting Visualization API lets you retrieve usage reports for your domain's hosted accounts and display them using a large selection of visualizations created by the developer community. More information is here:

[http://code.google.com/googleapps/domain/reporting/google\\_apps\\_reporting\\_visualization\\_api.html](http://code.google.com/googleapps/domain/reporting/google_apps_reporting_visualization_api.html)

#### **4.0.2.12.16 (M) Clarify the responsibility for providing end-user help desk services.**

"Supported"- Onix does not provide end-user help desk support. What we do provide is the collection of information from your early users, and from our past implementations, which combine to cover the vast majority of issues any users will face. We look to the State to provide Level 1 end-user help desk support for end users. If your Level 1 Helpdesk cannot solve an issue, it will escalate any issues to the project team for troubleshooting. If the project team cannot rectify the issue, Onix Networking will provide Level 2 Helpdesk and work to resolve the issue, or identify it as a break/fix condition requiring direct support from Google.

For the large majority of questions, chances are that someone else has asked it and that we have an answer appropriate for your end users in our help centers, minimizing the need for them to contact the Helpdesk. We continuously update these FAQs as we release new features. End users can also search or post questions on the Help Forum because our user discussion group is very active and moderated by Google employees. Information is searchable and categorized by topic so end users can easily find others who share your same interests. The Google Apps Help Center contains answers to most commonly asked end-user questions and ample self service material in form of articles and tutorial videos.

<http://www.google.com/support/a/users/>

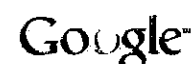
#### **4.0.2.12.17 (DR) Describe any options (including cost) for more aggressive and extensive disaster recovery metrics.**

"Supported"- Google's zero RPO and RTO capabilities are included with Google Apps at no additional cost. Moreover, Google provides the capability to download email to local systems, should you desire to do so, at no additional cost using IMAP, POP or Google's Audit API. In addition, Google offers Google Message Discovery (GMD; price listed elsewhere in this response), which creates an additional copy of emails for archiving purposes.

Up to 7 days of spooling is included with Google Message Security. In advent of a major failure, Google Message Security can be set to automatically spool incoming email. Upon restore the system will automatically unspool email.

#### **4.0.2.13 COLLABORATION**

##### **4.0.2.13.1 (M) Ability to create and manage folders for the files.**



"Supported"- Google Docs does provide the ability to create and manage folders. In addition to allowing you to manage your own folders, you can also share your folders, if you'd like to share a group of related items.

#### **4.0.2.13.2 (M) Ability to collaborate with staff members that are telecommuting or otherwise away from a State facility.**

"Supported"- Google Apps allows local, remote and offsite users to have the ability to securely collaborate, in real-time, with one another, via most web browsers.

#### **4.0.2.13.3 (M) Ability to share data and files stored within the solution with a Web interface.**

"Supported"- Sharing is an intrinsic feature of every Google application. Google offers the following sharing capability within its applications:

##### **Google Docs**

Google Docs is an online office suite comprised of the following components; a Word Processor (Google Docs), a Spreadsheet (Google Spreadsheets), slide presentations (Google Presentations) and a drawing application (Google Drawings). What differentiates Google Doc is that document sharing is built into each of these applications allowing end users to share and collaborate on these documents with participations both within, and optionally, outside of your organization. Users determine the level of sharing (read-only, edit or private) Google Docs is integrated with your enterprise directory, so to share a document, a user only needs to start typing his or her colleagues' names.

##### **Google Docs Shared Folders**

Google Docs provides for shared folders which may contain any type of file and any item stored in that folder will automatically be shared with those that have access to that folder. Documents can easily be stored in these shared folders and accessed by anyone who has access to those folders.

##### **Google Sites**

Google Sites is the easiest way to make information accessible to people who need quick, up-to-date access. People can work together on a Site to add file attachments (such as Word Documents, PDF's, etc.), information from other Google applications (like Google Docs, Google Calendar, Google Video), and free-form content. Collaborating together to create a site is as easy as editing a document, and you always control who has access, whether it's just yourself, your team, or your whole organization.

##### **Calendar**

Calendars may be shared with internal and optionally, external participants. They may be embedded in websites and applications as well.

#### **4.0.2.13.4 (M) Ability to share a folder of documents.**

"Supported"- The ability to share Google Folders is crucial to make sure that your users can share these materials with colleagues easily and efficiently. You may share both Google-



specific docs as well as traditional office documents, and additionally, just about any file type. Think of Google Folders as your own hard drive in the cloud.

Folder sharing and visibility options indicating how private or shareable a folder or a doc is: Google Folders can now be identified as: private; anyone with a link; or public on the web.

- Private: Docs start out as private. When you first create a doc, you are the only person with access to it. From there, you can give access to other people.
- Anyone with the link: If you set your doc to Anyone with the link it's like an unlisted phone number. In the same way that anyone who knows an unlisted phone number can call it, anyone who knows the web address or URL of that doc can view it.
- Public on the web allows anyone the ability to find and access that particular doc on the web. For example, you could create a flyer for a concert, save it as a public doc, post a link to it on your blog. You can also determine whether or not users may edit the docs and folders.

#### **4.0.2.13.5 (M) Ability to have multiple staff members work on common files at the same time and maintain version control (i.e., who, what, when).**

"Supported"- Individuals using Google Docs to create/edit a Document, Spreadsheet, or a Presentation are able to work on the same file, at the same time, from any location via their web browser. Google provides a complete version history for all users at all locations which allow those users to effectively find and revert back to any version of the document at any point in time. Additionally, there is the capability to lock-down editing privileges so that documents are effectively checked-out. They may be effectively checked back in, by unlocking the editing rights again.

#### **4.0.2.13.6 (M) Ability to recover or revert to prior file version.**

"Supported"- Google Docs Documents, Spreadsheets and Presentations have Revision History built in to them. All changes are tracked, including when it was changed, who changed it and what was changed. It is possible to revert to a previous version to a Google Docs Document, Spreadsheet or Presentation.

#### **4.0.2.13.7 (DR) Availability of internal collaboration tools.**

"Supported"- Google Docs is a fully-featured suite of office productivity tools that provide a real-time, simultaneous editing experience for multiple users collaborating on documents, spreadsheets, or presentations. Collaborators access the same online copy of the file in Google Docs, so there are no attachment compatibility problems, inbox storage quota issues, or versions to reconcile. When the group is done editing, the file can be stored in Google Docs, or exported back to the original format.

Google Sites is included with Google Apps and provides Wiki-like capability to your users. Changes, by user, are tracked automatically. Effective collaboration has become a key driver to improve team productivity. Project teams, often located across disparate locations and time zones, produce and distribute content in different formats and platforms. Teams need to consolidate relevant information in one place that's easy to navigate and retrieve. Contributors



and reviewers have specific needs to manage the creative process, maintain the project plan and keep all stakeholders informed.

#### **4.0.2.13.8 (DR) Delegation and transfer of ownership of the files.**

"Supported"- Google Docs (native documents and individual, uploaded files) as well as Google Sites allow the owner of a document or Site to include additional 'collaborators' with management privileges, edit privileges, as well as the ability to 'delegate' access to additional collaborators. Ownership of Google Docs, a Google Site, and a Google Video can be changed by the owner in the interface, or programmatically via API.

By default, you are the owner of every doc you create. However, you can transfer ownership to anyone you'd like, as long as that person has an email address.

##### **Things to consider before changing owners**

Being the owner of a doc gives you a lot of control over the doc, and once you change owners, you give up those controls -- so make the decision to change owners carefully. Consider the following:

- The owner is the only person who can delete a doc. Once a doc is deleted, no one can access it, including those it was shared with.
- When a user's account is deleted, all of that person's docs are deleted. Once docs are deleted, no one can access them, including those they were shared with.
- The owner is the only person who can always control how much access other users have to the doc. They can remove editors and viewers, they can share with as many people as they like, they can change the visibility option, and they can limit or activate the ability for editors to share the doc with other users.

#### **4.0.2.13.9 (DR) Export/Import functionality for all editable file types.**

"Supported"- You need to be online and signed in to use Google Docs. However, you can download your documents, spreadsheets and presentations, work on them offline, then re-import them to Google Docs.

When uploading a file to be converted to Google Docs, please keep the following in mind:

- You can only upload and convert these file types:
  - For spreadsheets: .xls, .xlsx, .ods, .csv, .tsv, .txt, .tsb
  - For documents: .doc, .docx, .html, plain text (.txt), .rtf, .odt
  - For presentations: .ppt, .pps
  - For drawings: .wmf
  - For OCR: .jpg, .gif, .png, .pdf
- Other file types you can upload but not convert include: .zip, .jpg, .mp3
- There are some file-size limits.
- Some of your original formatting may not be preserved.

To export an individual document, spreadsheet, presentation, or drawing to your local computer, follow these specific instructions:

For documents: Visit the edit page of the document you'd like to save, click **File**, then select one of the **Download as** options. Here are the supported file types for documents:

- HTML





- RTF
- Word
- Open Office
- PDF
- Text

For spreadsheets: Visit the edit page of the spreadsheet you'd like to save, click **File**, and then point your mouse to the **Export** option. A list of supported formats appears, from which you can select the format you'd like to export with. Here are the supported file types for spreadsheets:

- CSV
- HTML
- ODS
- PDF
- XLS
- TXT: only for a single sheet

Note: it's not possible to export a spreadsheet as .xlsx.

For presentations: Visit the edit page of the presentation you'd like to save. Click **File** and select **Save as PDF** or **Save as PPT**, depending on your preference.

For drawings: You can export your drawing as a PDF, PNG, or SVG file by clicking **Edit > Export** from the drawing toolbar.

#### **4.0.2.13.10 (DR) Ability to create or leverage existing groups of employees. Access defined groups (Agency, division, bureau) or create new groups quickly based on project / task needs.**

"Supported"- Content from Google Docs, Calendar, Sites, and Videos can be shared with groups as well as individuals, with groups included as auto complete options in sharing interfaces along with individuals. Group members can be added to and removed from the group allowing the group owner to manage who has access to content. Groups be managed at a domain level via the Google Apps Provisioning API, or by users without IT support through the Google Groups component service. Google Groups provides additional email discussion list capabilities to support user collaboration.

#### **4.0.2.13.11 (DR) Availability of a Wiki type solution for collaboration that allows changes to be tracked by user.**

"Supported"- Google Sites is included with Google Apps and provides Wiki-like capability to your users. Changes, by user, are tracked automatically. Effective collaboration has become a key driver to improve team productivity. Project teams, often located across disparate locations and time zones, produce and distribute content in different formats and platforms. Teams need to consolidate relevant information in one place that's easy to navigate and retrieve. Contributors and reviewers have specific needs to manage the creative process, maintain the project plan and keep all stakeholders informed.

With Google Sites, you can easily manage projects and create, share, find, and publish content across your organization. Easy to use features such as site and page templates and embedded documents make it easy for any user to create useful sites. Google Sites can be used for



company intranets, portals, team project and more. Furthermore, the Google Sites API gives third-party developers a way to access, integrate with, and extend the platform. The To-Do gadget is an example of extending a Google Site with a tool that can enable teams to track and manage tasks.

#### **4.0.2.13.12 (DR) Ability to store not only documents and spreadsheets but also other media if needed.**

"Supported"- Any file type can be uploaded and stored in Google Docs.

#### **4.0.2.13.13 (DR) Ability to make any document or email part of a "To Do" List.**

"Supported"- You have the ability to generate task lists which can then be emailed to other users for consumption (Delegation) into their task lists. Additionally, tasks may be overlaid in users' calendars with reminders and due dates.

Tasks is a Gmail feature designed to help you keep track of the things you need to do. You can create lists of items, set due dates and notes, and even add Gmail messages directly to Tasks. To use tasks in Gmail, click the Tasks link under Contacts, on the left side of the screen brings up the Tasks interface. To enter tasks, just click in the Tasks window and start typing just like you would in a word processor. Once you've typed in a task, press Enter to create another one, or use the + button at the bottom of your list.

You may turn any Gmail message into a task with one click. You may also turn any bulleted list from another user - whether from Gmail or another system - directly into a task list. It's easy to view and check off Tasks on your Google Calendar because all Tasks may be overlaid directly onto the calendar itself. If you click on the Tasks link in your Google Calendar, you'll get a new Tasks calendar added to GCal. Tasks with a due date will show up with a "complete" checkbox. You may choose your most important tasks, schedule them and check them off as you do them from your calendar. You can move tasks around on your calendar to update the item's due date, too.

#### **4.0.2.13.14 (DR) Integration with external social media services.**

"Supported"- Google Apps presents an inline preview integration for common social websites such as; Yelp, Picasa, Flickr, Google Docs, Blogger, YouTube and more.

Email has become the hub for most people's business day. Gmail contextual gadgets intelligently bring what you need right into your inbox from 3rd party applications such as social media sites. Gmail contextual gadgets scan for triggers, such as names or purchase order numbers, within a message and present relevant actions in-line with the email.

Contextual Gadgets greatly accelerate user adoption by bringing the application directly to the user in context and in their normal work flow. Many great apps fail to gain user traction because they are separated from the normal workflow. There are two types of plug-ins; default and custom. The former come with the system and the latter allow customers to design or purchase their own gadgets for integration with existing systems.

Google Buzz, available today in consumer Gmail offers a compelling activity stream coupled with the ability to integrate with existing social media sites such as Twitter, Flickr and more. Best



of all, it's integrated into the interface where users already spend the bulk of their time, email. We envisage this functionality in Google Apps soon.

#### **4.0.2.14 OFFICE PRODUCTIVITY**

##### **4.0.2.14.1 (DR) Presentation tools and ability to: read, open, edit, copy, paste, and display standard office product formats (e.g .doc, .docx, .odt, xls, etc.).**

"Supported"- With Google presentations, you can easily create, share, and edit online presentations. Features include:

- Import presentations in .ppt and .pps file types and export your online ones.
- Insert images and videos, and format your slides as you want.
- Allow simultaneous real-time viewing of presentations, online, from remote locations.
- Publish and embed your presentations in a website for the world to view.

##### **4.0.2.14.2 (DR) Track all documents / changes by user. Be able to preserve documents by user and date.**

"Supported"- Google Apps allow users and administrators to track who has changed and edited documents. Google Apps keeps track of each version of a document that is saved so that users may step through or revert back to any version of the document at any point in the editing cycle.

##### **4.0.2.14.3 (DR) Ability to capture an email as a file and save it and/or allow the email to be attached as a file in another system.**

"Supported"- The Gmail interface allows a user to view the full, original text of one of their email messages, including all email headers, in a web browser. The text can then be transferred to a Google Doc (saved in the web browser and imported, or copied and pasted), which would then allow the text to be saved, shared, and exported to another format.

##### **4.0.2.14.4 (DR) Word Processing.**

"Supported"- With Google Documents, you can easily create, share, and edit documents online. Features include:

- Upload Microsoft Word, OpenOffice, RTF, HTML or plain text documents, create documents from scratch, and download your online ones.
- Edit documents online simultaneously with anyone you choose, and invite others to view them.
- Keep track of who made changes to a document and when, and roll back to any version.
- Publish documents online to the world, as webpages or post documents to your blog.
- Email your documents out as attachments.

Docs view and edit capability is available on mobile devices such as the iPhone and iPad and more. Google expects to deliver early in 2011 -- the return of offline support for Google Docs. For those who used offline, they are bringing back the much improved feature by taking advantage of advancements in modern browser technology like HTML5.

##### **4.0.2.14.5 (DR) Spreadsheet capability.**



"Supported"- With Google Spreadsheets, you can easily create, share, and edit spreadsheets online. Features include:

- Import and export these file types: .xls, .csv, .txt and .ods. You can also export data to a PDF or an HTML file.
- Format your cells and edit formulas so you can calculate results and make your data look the way you want it.
- Chat in real time with others who are editing your spreadsheet.
- Embed a spreadsheet, or a section of a spreadsheet, in your blog or website.

#### **4.0.2.14.6 (DR) Ability to migrate historical documents, spreadsheets, presentations and databases.**

"Supported"- Google supports the ability to import, export, share and store following file types: Google Docs, Google Spreadsheets, Google Presentations, HTML, Plain text (.txt) Microsoft Word (doc/docx), RTF, pdf, Open Office (.odt), xls, xlsx, csv, ods, txt, tsv, tsb, ppt, pps and pptx. Files may be migrated one at a time, through a bulk import feature or programmatically through Google's Doc List Data API. Databases can be exported to a CSV file and imported, or the Google Secure Data Connector (SDC) can read them directly from a web service interface such as the Google feed server.

#### **4.0.2.14.7 (DR) Ability to synchronize with apps that need access to Calendar and Address Book.**

"Supported"- Google Apps Calendar supports the iCal standard, and so is inherently shareable both internally and externally with multiple owners subject to granular permission levels including the ability to see all event details, just free/busy, make changes to events, and perform further delegation.

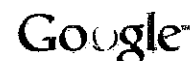
The iCalendar format allows Internet users to send meeting requests and tasks to other Internet users, via email, or sharing files with an extension of .ics. Recipients of the iCalendar data file (with supporting software, such as email client or calendar applications) can respond to the sender easily or counter propose another meeting date/time.

Google Apps Sync for Microsoft Outlook supports synchronization of calendar and address book information with Microsoft Outlook.

Google Apps also provides a rich set of calendar and address book gadgets and APIs:

- The Calendar Publishing Tools are pre-built elements that can be embedded on your website to give it Google Calendar functionality
- The Calendar Data API lets you incorporate Calendar functionality into your own application or website
- The CalDAV protocol provides a common protocol for exchanging information between different scheduling servers and client applications
- Google's implementation of Portable Contacts lets your web application request data from Google Contacts
- The Google Contacts Data API allows client applications to view and update Contacts content in the form of Google Data API feeds.

Google Apps also supports a wide variety of mobile clients including Android; for further information, see <http://mail.google.com/support/bin/answer.py?hl=en&answer=75726>



#### **4.0.2.14.8 (DR) Ability to share documents/spreadsheets/presentations internally or externally.**

"Supported"- Google Docs allows a user to easily share a document, spreadsheet, or presentation with other internal users. The Google Docs interface provides clear indications for the current sharing-status of a given document, and the Share interface makes it easy for a user to share a Google Doc with another internal user or group.

Google Apps allows the domain administrator to permit users to use the native sharing features of Google Docs to share documents, spreadsheets, or presentations with users outside of the customer's domain for collaboration, with notifications in the interface to remind users that they are sharing. If this is disabled, users have the ability to export their Google Docs to common/standard formats, and share the downloaded files via traditional sharing methods such as email.

#### **4.0.2.14.9 (DR) Ability to edit documents either online or on a device that is not connected to the Internet.**

"Supported"- All of your Docs can be accessed and edited online using your internet browser. When you are not connected to the Internet, you can always export files to your computer from the Google Docs homepage, then upload your offline files back to Google Docs after you're finished editing offline.

Google expects to deliver early in 2011 -- the return of offline support for Google Docs. For those who used offline, they are bringing back the much improved feature by taking advantage of advancements in modern browser technology like HTML5.

For more information see:

<http://googledocs.blogspot.com/2010/12/update-on-google-docs-offline-and-new.html>

#### **4.0.2.14.10 (DR) Functionality for form creation and database, with ability to share created forms to limited groups.**

"Supported"- Google Docs also offers users the ability to create multi-question survey forms (with response options including text / paragraph, checkbox, dropdown, and radio buttons), which can be distributed to individuals and groups via email, or published for any users to access. Responses populate a Google Spreadsheet, allowing for the quick collection and aggregation of responses.

#### **4.0.2.14.11 (DR) Project management capabilities.**

"Supported"- Thousands of free project management templates are publicly available in the Google's crowd-sourced templates gallery for use with Google docs. Just perform a search on "project" or "project schedule" in the Templates Gallery at: <https://docs.google.com/templates>.

Today, more than 3 million businesses and thousands of universities not only have access to Google's core suite of applications, they also get easy access to 200+ of the best apps on the web through the Google Apps Marketplace. These installable Marketplace apps are easy to try



and buy, and offer single sign-on and hassle-free access from the Google universal navigation bar. Here is a sample of some of the installable apps from the Apps Marketplace for Project Management:

Project management, with a focus on planning and tracking

Mavenlink - an end-to-end solution for professional services delivery

Ganttter - powerful desktop scheduling right from your browser

Smartsheet - online project task sheets w/dependencies, Gantt charts & files

Zoho Project - beyond planning...get your projects done faster

Viewpath - manage project tasks and resources with drag/drop simplicity

Cohuman - task-centric communications to synchronize people & teams

Comindwork - fully customizable Gantt views, workflows and to-dos

Teamup - anytime, anywhere project tracking for businesses of all sizes

WorkforceTrack - online collaboration, reporting, time tracking and billing

For a complete list of Apps Marketplace Project Management, Collaboration, Task Management, Time and Product Management applications and add-ons, please see: <http://googleenterprise.blogspot.com/2010/11/google-apps-marketplace-project.html>

#### **4.0.2.14.12 (DR) Drawing capabilities**

"Supported"- Google Drawings includes drawing capabilities, which allows users to insert and manipulate shapes (including standard flowchart shapes), connecting lines and arrows, curved lines, manually-drawn lines (scribbles), text boxes, as well as user-uploaded images. Drawings may be laid-out precisely with alignment guides, snap-to grid, and auto distribution. Drawings can be inserted into other Google documents, spreadsheets, or presentations using the web clipboard. Drawings supports real-time collaboration between users. You can also chat with other editors from within Google drawings, publish drawings as images, or download drawings to your computer.

#### **4.0.2.15 VIDEO and WEB CONFERENCING**

##### **4.0.2.15.1 (DR) Bandwidth efficiency and controls.**

"Supported"- With Gmail, users access their messages from Google Apps server using a web-based interface, causing mail flow and bandwidth usage to change as follows:

- Messages that users exchange with others outside your local corporate network continue to use external bandwidth, but now flow through Google Apps servers on the Internet.
- Intradomain messages now also flow through Google Apps servers and use external bandwidth.

From our field experience, we've observed that the following optimizations in the Google Mail architecture can help reduce the impact of the bandwidth usage of intradomain and external email:

- 1) Messages are downloaded only on demand. Portions of the email headers are used unless and until a user requests to open a specific message. This differs from the traditional email push or polling model in which every message is typically downloaded in full including attachments



- 2) Interface optimizations use lightweight javascript to pull just the data needed to provide a positive user experience. Graphics are minimized.
- 3) Attachment download options - Users can see in-line snapshots of an attached graphic and view a preview of an attached PDF and other common files in the browser. This consumes less bandwidth than downloading because no bandwidth is used until the user requests to view the attachment and that attachments are rendered on Google's servers so only a portion of the information is actually transmitted to the end user.
- 4) Reduced transmission of attachments - instead of uploading attachments end users will move towards generating attachments directly from Google Apps or simply sharing links to Google Docs items instead of attaching
- 5) Simplified networking and potential less reliance on expensive WAN links to centralized email servers. Because each location sends mail to GApps through the internet, this may reduce the internal bandwidth resourcing complexities.
- 6) Mobile and remote usage. Instead of consuming bandwidth through the corporate Internet link, mobile or telecommuting users only use their own local Internet connection.
- 7) Spam blocking in the cloud - if you currently have on-premises anti-spam solution, you may find that the switch to Google Mail significantly reduces the amount of unwanted inbound traffic processed through your Internet connection. More information can be provided to help you estimate how your bandwidth might change moving to Google Apps

#### **4.0.2.15.2 (DR) Ability to archive video sessions.**

"Supported"- Video chat sessions cannot currently be archived natively. However, by utilizing Camtasia, Jing or any other screen capture utility, the session could be archived for future use.

#### **4.0.2.15.3 (DR) One to one internally.**

"Supported"- Google Chat does include the ability to have a video chat with another internal user, provided both users have the required hardware for capturing audio and video, such as a web cam and microphone. Video and voice can be limited to internal (intra-domain) chat sessions only

#### **4.0.2.15.4 (DR) Multiple locations internally.**

"Supported"- One-to-many video chat that is built into Google Apps, and requires no additional hardware, software or licensing, is currently on the roadmap for Google Apps.

#### **4.0.2.15.5 (DR) Ability to utilize saved Video files within office productivity tools.**

"Supported"- Google Video is included with Google Apps. You may embed Google videos and share them internally, externally (or both) in third party or native productivity tools such as Google Sites or embedded directly in presentations and blogs.



#### **4.0.2.15.6 (DR) User tracking Options.**

"Supported"- Google Apps allow users and administrators to track who has changed and edited documents. Google Apps keeps track of each version of a document that is saved so that users may step through or revert back to any version of the document at any point in the editing cycle.

#### **4.0.2.15.7 (DR) Office tools accessible to large virtual teams. Tools to include Blogs, Wikis, and social networking tools.**

"Supported"- Google Sites enables teams to centralize documents, spreadsheets, presentations, videos, slideshows and more to help keep teams organized; they can build collaborative sites, wikis and blogs faster with templates for project workspaces, team sites, intranets and more.

Google Docs also allows large virtual teams to access office tools. Google Docs can be embedded within Google Sites to create an integrated authoring and publishing capability.

#### **4.0.2.15.8 (DR) Remote Desktop Access/Control.**

"Not Supported"- Remote Desktop Access is not required with Google Apps, given the client-less nature of the applications. All Google Apps applications are accessible via web browsers. Information contained within a Google Apps application can be shared, and collaborated on, with administrators in order to help end-users diagnose issues and answer questions.

Google Apps users access the applications via their existing computers and mobile devices (smart phones, tablets, etc.), which allows existing Remote Desktop Access/Control software to be utilized.

#### **4.0.2.15.9 (DR) External video conferences.**

"Supported"- If the client-side Apps administrator allows chatting outside of the Apps domain, internal users can have a video chat with an external Google Apps or Gmail user, provided both users have the required hardware for capturing audio and video, such as a web cam and microphone. In addition to restricting video chat use to internal users, administrators may disable it altogether.

#### **4.0.2.15.10 (DR) Real-time on screen notation and editing.**

"Supported"- Google Apps supports full real-time collaboration, including simultaneous document, presentation, spreadsheet and drawings editing, with on-screen comments, integrated real-time chat and display of collaborator information.

### **4.0.2.16 VIRTUAL STORAGE**

#### **4.0.2.16.1 (M) Ability to search (e-Discovery) files.**

"Supported"- Google Message Discovery supports a completely searchable email archive for the purposes of eDiscovery.

Google Message Discovery lets you:





- create a centralized and searchable email repository for your organization
- quickly search across the archive to find emails and save result sets into a file

With the Google Documents List API, administrators can look across all documents stored within their organization including searching document contents, viewing document revision history and sharing permissions, and downloading snapshots of those documents in common file formats such as PDF, DOC, XLS, and Open Office.

#### **4.0.2.16.2 (DR) User tracking options.**

"Supported"- Google Apps allow users and administrators to track who has changed and edited documents. Google Apps keeps track of each version of a document that is saved so that users may step through or revert back to any version of the document at any point in the editing cycle.

With the Google Sites file cabinet functionality, users can subscribe to file cabinet changes to track when new files or versions are uploaded.

#### **4.0.2.16.3 (DR) Ability to store files (all types) and work as a virtual drive on the PC desktop and with the operating system file manager or applications that integrate with storage services. Specify the amount of storage provided, how that amount can be increased, and under what conditions.**

"Supported"- The Google Docs platform provides various cloud-based file storage and sharing capabilities, including the ability to upload ANY file type and store it in its native format. As with all Google Apps Products, Google has developed a rich, web-based user-interface for creating, uploading, editing, and sharing files in Google Docs. Third-party partner products like OffiSync, Syncplicity, and Memeo Connect offer alternative, thick-client or OS-integrated solutions.

You may upload through the web browser, through third party tools such as Memeo Connect and through Google's APIs. Each user receives 1 GB of storage for any type of file in Google Docs. Additionally, Google Sites provides 10GB + (500 MB \* # of users) worth of pooled storage for the entire organization. Additionally, Google Video provides 3 GB \* # of users worth of pooled video storage for the entire organization.

#### **4.0.2.17 OTHER**

##### **4.0.2.17.1 (M) Provide the process, responsibilities and costs for the cessation of the contract, including any costs and procedures for data migration and cleansing of State data from Respondent data centers.**

"Supported"- If the contract is terminated, Google provides Customers with access to the Customer's Data for a period of time and Google will provide the tools necessary for migration. See Section 11.2 of their agreement ("(ii) Google will provide Customer access to, and the ability to export, the Customer Data for a commercially reasonable period of time at Google's then-current rates for the applicable Service;"). Google does not impose any additional costs or penalties for cessation of a contract. Moreover, Google provides a number of free tools, managed by the Google Data Liberation Front team, for migration away from Google Apps. The Google Data Liberation Front is an engineering team at Google whose singular goal is to make it easier for users to move their data in and out of Google products. Google does this because they believe that you should be able to export any data that you create in (or import into) a



product. They help and consult other engineering teams within Google on how to "liberate" their products. This is their mission statement: Users should be able to control the data they store in any of Google's products. The DLF team's goal is to make it easier to move data in and out. To that end, Google has a rich set of API's and tools to allow you to move your data out of Google and to other platforms; either cloud-based or hosted. A list of APIs can be found at: <http://code.google.com/googleapps/docs/>.

Additionally, Google supports standard email protocols such as POP, IMAP and MAPI that making moving your data to and from Google simple. We haven't seen instances of customers moving from one hosted system to another, but it's technically possible and our apis and support for protocols would be the mechanism by which this would be accomplished. The migration tools provided by Google have no cost and customers can work with us to implement the migration processes.

#### **4.0.2.17.2 (M) Segregation of State data from other data.**

"Not Supported"- Google Apps run in a multi-tenant, distributed environment. Rather than segregating each customer's data onto a single machine or set of machines, data from all Google Government customers is distributed amongst a shared infrastructure composed of tens of thousands of homogeneous machines. Google Apps uses the Google File System (GFS), a distributed file system designed to store large amounts of data across thousands of computers. Structured data is then stored in a large distributed database, built on top of GFS. Data is chunked, obfuscated and replicated over multiple systems, so that no one system is a single point of failure or vulnerability. In order to access the client's data, applications, systems, and employees must authenticate themselves. This ensures that only authorized employees or applications can access data in. For example, a Google Mail (Gmail) administrator can only view Gmail data on a machine, even if the machine also stores data for other Google Apps, such as Google Docs. Similarly, the Gmail backend cannot be used to access other Google Apps data stored on the machine. As a result, other services or systems cannot either maliciously or accidentally access or modify data for which they are not authorized. Google also has physical security controls implemented at each Google data center includes at least an electronic card access control system, alarm systems, interior and exterior cameras, and security guards.

#### **4.0.2.17.3 (M) State email and data storage by hosted providers remaining within the continental United States.**

"Supported"- Google Apps for Government email and data storage remains within the continental United States.

#### **4.0.2.17.4 (M) Access to State data and management functions by State staff.**

"Supported"- Designated State employees who have administrative access to the State's Google Apps system can access State data by 1) taking over an individual user's Google Apps account, or 2) using the secure Google Apps APIs to access specific pieces of data.

Also, the Google Message Discovery (GMD) application supports various roles which can be described as:

- Auditor: Reviews the search and export activity of investigators. Data cannot be retrieved from the data store without triggering an audit log entry.



- Investigator: Queries the archive and reviews/exports data; saves search criteria and results; manages collections of data called "investigations"
- System Administrator: Manages the user registration and enables/disables archiving for groups of users. (No visibility to user data)
- User: searches for messages which they have personally sent or received. (Visibility to only their personal messages)

#### **4.0.2.17.5 (M) Specialized deployment support from Respondent or Respondent partners.**

"Supported"- The Google Apps Deployment team helps to support customers through the migration and deployment process:

- Provides deep technical knowledge and best practices around Google Apps, and its points of integration with customer-systems
- Serves as an interface between customer and Google Apps Product Management, Support, and Engineering teams
- Advises on deployment best practices, based on previous large-scale Google Apps migrations and deployments
- Participates in project planning alongside Google partners, to ensure successful deployment-projects

Onix Networking typically follows a three-phase approach. It is important to note that the methodology used below is the same that was used at dozens of other similar-sized rollouts, thus the model has proven worthy. We have defined three general phases to the rollout. In each phase there will be a preparation part to it and a launch and monitor part to it. So, you will see that reflected in the timelines throughout the proposal. Below is an overview of the phases, scope and timing for a Google Apps rollout at the State of Utah.

#### ***Phase 1 – Early Adopters***

In this phase, we are going to put together the communications, training and technical work plans needed to accomplish the rollout to the target audience in the first phase. We typically break the overall team into three sub-teams to cover these three areas, thus creating parallel work streams. This group will go through training and organizational change management as well to provide feedback on each area so we can make changes as needed, before broadening the audience in Phase 2. In Utah's case, it is recommended that 100 users participate in this phase.

#### ***Phase 2 – Mock Deployment***

In this phase, we are going to take lessons learned from the first phase, make changes, and then deploy the solution to a subset of business users across the organization. It is a best practice to have the target audience in this phase made up of various roles and job functions across the organization, so we can test out real-world use cases before moving to a general deployment. This audience will also go through the revised communications and training from Phase 1 to test it before going into a general deployment. In Utah's case, it is recommended that 1000 users participate in this phase

#### ***Phase 3 – General Deployment***

For the general deployment, we will work with the State to determine the best agencies to go first and the order of the remaining entities. It is a best practice to move organizations that work together most closely all at once. This minimizes any issues related to coexistence of several



systems.

#### 4.0.2.17.6 (M) Post deployment support from Respondent or Respondent partners.

"Supported"- For customers such as the State of Utah, Google will provide a named Technical Account Manager (TAM) who will act as a central point of contact between The State's support organization and Google. The TAM will act as a named point of contact for Customer for planning and escalation purposes to represent Customer to Google for important topics (Engineering, Product, Management, Support). The TAM will provide relevant information to Customer when available and address inquiries pertaining to the Services in use or planned for use. In addition to priority routing of support requests, the services provided by the TAM may include:

- \* Answer general queries and consultancy
- \* Case management and escalation
- \* SLA claims
- \* Service Management reviews and support reports (e.g. customer's use of the portal / Unify)
- \* Assist triage of FRs and bugs; feature request and bug tracking
- \* Advice for new / changed features and config; new / changed feature notification
- \* Transition from deployment team
- \* Weekly conf calls
- \* Account reviews, recommendations of best practices

Your TAM will provide notification of changes that they ascertain will impact the State's usage or satisfaction with Google Apps. In addition, to Google's TAM, Onix Networking will also have a dedicated team of engineers and an Account Manager assigned to the State.

A typical support hierarchy would look like this:

Condition	Support Method	Actions
Severity1/Service Unavailable	Google Phone Support 24X7	Support Case is generated; forward Case # to Onix so that we may participate, and/or escalate as needed through partner infrastructure
Severity2/High Impact	Create Support Case; generate ticket number; State IT calls Onix	Break/Fix versus usability issues are defined. Break/Fix go to Google, and other issues are handled by Onix or further researched to provide an answer to the State
Severity3/Moderate Impact	Create Support Case; generate ticket number; State IT calls Onix	Break/Fix versus usability issues are defined. Break/Fix go to Google, and other issues are handled by Onix or further researched to provide an answer to the State
Severity4/Low Impact	Create Support Case; generate ticket number; State IT calls Onix	Break/Fix versus usability issues are defined. Break/Fix go to Google, and other issues are handled by Onix or further

		researched to provide an answer to the State
--	--	--

#### **4.0.2.17.7 (DR) Access to State data and management functions by non-State entities and personnel.**

"Supported"- Google employees will access your account data only when an administrator from your domain grants Google employees explicit permission to do so for troubleshooting purposes. During the course of troubleshooting an issue or other investigation, the Google Support team may ask for the creation of a test administrator account, solely to be used to resolve the particular issue at hand. Google employees or automated systems may also take down any content that violates the Terms of Service.

#### **4.0.2.17.8 (DR) Ability to utilize local and off-site based office productivity tools.**

"Supported"- By definition, Google products and services are off-site because they're hosted by Google at Google's data centers delivered through the web browser. Additionally, Google has announced the release of Google Cloud Connect for Microsoft Office which allows customers to leverage local office productivity tools while gaining many of the advantages of off-site tools.

#### **4.0.2.17.9 (DR) Availability of List serve capabilities.**

"Supported"- Google Apps supports a list serve capability through Google Groups. Client-side Apps Administrators may create lists or allow end users may do so.

Google Groups allows for an unlimited number of user or administrator created groups. Google Groups not only allows you to manage and archive your email lists, but also provides a method for true communication and collaboration with group members. Google Groups offers generous storage limits, customizable pages, file storage, shared contact lists, contact profile pages and in general is a rich mechanism for information interchange.

Users may create personal distribution lists within their person contacts or as Google Groups lists. The user-managed Groups service is an optional feature of Google Groups for Enterprise. Enable the service to facilitate messaging and collaboration among users and improve their productivity. With user-managed groups, users can: Manage their group memberships, allowing them to tailor email communications to their needs, without having to make requests to your IT department.



## Tab IV- Project Plan

### 4.0.3 Project Management and Implementation

#### 4.0.3.1 STAFFING

**4.0.3.1.1 (M) The Respondent shall be responsible for all required costs attributable to its officers and employees, including, but not limited to, worker's compensation premiums and deductibles, unemployment compensation tax withholding contributions, tax withholding contributions, and similar items.**

"Supported"- Onix agrees to these terms.

**4.0.3.1.2 (M) The Respondent shall have the sole responsibility for the hiring, recruitment, management, training, and firing of the Respondent's employees. The Respondent shall disclose the names and positions of its officers and employees to DTS. The Respondent shall provide information on employees and officers as requested of any audit activity or report. The Respondent must submit a list of names for all employees who require access to State data and data centers so they can receive and pass a required DTS background check prior to gaining access to the State's secure resources and facilities.**

"Supported"- Onix agrees to these terms.

**4.0.3.1.3 (M) The Respondent shall ensure that all employees, consultants, and external staff that work on the implementation project have signed general and specific confidentiality and privacy statements to protect confidential data prior to gaining access to the State's secure resources and facilities.**

"Supported"- Onix agrees to these terms.

**4.0.3.1.4 (M) Respondents shall describe their procedure for conducting employee background checks, including, but not limited to, drug tests, and financial or criminal history. As warranted by any specific services to be developed under this contract, the Respondent shall agree to submit a list of names of employees to undergo employee background checks, as determined by the State, with DTS as the managing partner. This includes employees with ongoing operational responsibilities, that have access to State data.**

"Supported"- Onix is agreeable to these terms as long as the State is bearing the cost of any State-requested background checks.

Onix is a long-time Google partner, and has been in business serving State, Federal and Local government contracts for even longer. Onix has long-term employees who are trusted partners with State and Federal agencies. For new hires, especially customer-facing representatives and implementation personnel, Onix has each employee sign a document testifying to the fact they have no former felonies on their record, and that they are not under the influence of illegal drugs, or abusing legal prescription medicines. As a further step, Onix is in the process of conducting background checks for each employee at this time to update any information we have on employees.

**4.0.3.1.5 (M) The Respondent shall recruit, hire, retain, and train qualified and sufficient personnel to implement the project plan. DTS reserves the right, as the State contracting organization, to recommend staffing additions to reduce migration wait times and improve implementation responsiveness to agencies. All such requests will be made in writing, and shall be within the agreed upon scope of the contract. The Respondent must provide a list of proposed or existing staff to meet the proposed service levels.**

"Supported"- Onix agrees to these terms. Onix is proposing the following personnel to work on the State's implementation:

- Tony Bianco – President; Onix Google Apps
- Tim Needles – CEO; Onix Networking
- Tom Cooper – COO
- Grant McCarthy – Professional Services
- Steve Holly – Professional Services
- Richard Foreman – Professional Services
- Greg Heier – Professional Services
- Derrick Anderson – Professional Services
- Adel Etayem – Professional Services
- Dave Lyon – Professional Services
- Terry Chambers – Professional Services

Please refer to Attachment C for their resumes.

#### **4.0.3.2 IMPLEMENT TECHNOLOGY BEST PRACTICES**

**4.0.3.2.1 (M) The Respondent shall follow professional practices, including the development of project plans, requirements documentation, design documentation, test data, and test procedures. The Respondent shall describe in their proposals what methodologies and best practices that they adhere to.**

"Supported"- Onix has hundreds of successful implementations to date. We follow the D4M method (Define, Design, Development, Deploy, and Measure) to ensure we understand the issues and monitor, manage and measure results. In addition, we divide the work into Technical, Communications and Planning, Change Management and Training work streams which defines every area of focus.

#### **4.0.3.2 INTERACT EFFECTIVELY WITH THE STATE**

**4.0.3.2.1 (M) The Respondent shall work with the DTS Infrastructure Management Group, and in cooperation with Agency Partners, to implement the hosted email, communication, and collaboration services project.**

"Supported"- Onix agrees to these terms.

**4.0.3.2.2 (M) The Respondent shall provide a mutually defined and approved Service Level Agreement (SLA) that addresses both migration and transition deliverables, and ongoing service level expectations.**



"Supported"- This is part of Onix's standard offering. We produce a Statement of Work (SOW) which includes all facets of the implementation, and lists line item detail of work to be performed, with service hour estimates for each line item. Then we assign an owner to each task. We have weekly status reports and audits which we provide for each customer. The SLA is mutually agreed upon, and we will work with the State to define this document as part of the award.

#### **4.0.3.3 COMPLIANCE WITH ALL STATUTORY and LEGAL REQUIREMENTS**

**4.0.3.3.1 (M) The Respondent shall comply with all relevant county, State, and federal statutes, rules, and regulations applicable to assuring privacy and confidentiality. Any special rules must be included in the SLA by the Agency Partners.**

"Supported"- For detailed information please see:

<http://www.google.com/support/a/bin/answer.py?answer=60762&hl=en>

##### Privacy in email

In personal email communications, there has always been, and always should be, an expectation of privacy between the sender and the intended recipients of a message, enabling open communication with friends, colleagues, family, and others. Google does not share or reveal email content or personal information with third parties. Email messages remain strictly between the sender and intended recipients, even when only one of the parties is a Gmail user.

Of course, the law and common sense dictate some exceptions. These exceptions include requests by users that Google's support staff access their email messages in order to diagnose problems; when Google is required by law to do so; and when we are compelled to disclose personal information because we reasonably believe it's necessary in order to protect the rights, property or safety of Google, its users and the public. For full details, please refer to the "When we may disclose your personal information" section of our privacy policy. These exceptions are standard across the industry and are necessary for email providers to assist their users and to meet legal requirements.

##### Protecting your privacy

Google takes privacy very seriously, and your trust is important to us. Gmail users should know:

- Google does not share any email content or other personally identifiable information with advertisers.
- No humans read any email messages to target advertising or related information that users may see on Gmail.
- Google also takes several steps to guard the confidentiality of users' information by offering a number of industry-leading protections.

##### Gmail and Government Access to Account Information

Google complies with valid legal process, such as search warrants, court orders, or subpoenas seeking account information. These same processes apply to all law-abiding companies. As has always been the case, the primary protections you have against intrusions by the government are the laws that apply to where you live.

Google's complete privacy policy is here: [http://mail.google.com/mail/help/about\\_privacy.html](http://mail.google.com/mail/help/about_privacy.html)





Google's Contract Terms are here:

[http://www.google.com/apps/intl/en/terms/premier\\_terms.html](http://www.google.com/apps/intl/en/terms/premier_terms.html)

[http://www.google.com/apps/intl/en/terms/additional\\_services.html](http://www.google.com/apps/intl/en/terms/additional_services.html)

#### **4.0.3.4 COMPLIANCE WITH DTS STANDARDS and POLICIES**

**4.0.3.4.1 (M) All services shall be performed in accordance with DTS standards and policies. These standards and policies can be found at: <http://dts.utah.gov>. The successful Respondent shall work with DTS on developing any additional standards that the Respondent believes are appropriate to successfully implement Hosted Email, Communication and Collaboration services. The Respondent shall document all systems analysis and programming activities. Copies of all such work shall be available for inspection by DTS before such programs are implemented.**

"Supported"- The terms as noted are not available on the DTS web site. Onix performs services for Federal, State and Local governments on a regular basis and should have no issues with the State's policies, but we have not been able to locate them online.

#### **4.0.3.5 PROJECT SCOPE DEFINITION**

##### **4.0.3.5.1 (M) Define the project scope with primary emphasis on Email, Calendaring, Scheduling, Training, and Application Email Modifications**

"Supported"- Onix will address Email, Calendaring, Scheduling, Training, and Application Email Modifications through the following work streams. Onix Networking will provide technical, project and communications guidance during the entire deployment, including the following tasks:

- Active Directory Integration – Google Apps Directory Sync
- Hard launch of Google Mail, Google Calendar, and Google Documents
- Train the Trainer sessions
  - Early Phase (~100 users)
    - 2 Webinars and one onsite end user training
    - 2 Executive one-on-one sessions
    - 1 Executive Assistant webinar
    - 1 Helpdesk webinar workshop
  - Mock Deployment (~1000 users)
    - 1 Onsite end user training
    - 1 end user webinar
    - 1 train the trainer onsite
    - 1 train the trainer webinar
    - 10 Executive one-on-one sessions
    - 2 Executive assistant webinars
    - 2 Helpdesk webinar workshops
- Technical guidance in the setup of a local SMTP relay for legacy and server applications.
- Technical guidance in the mobility access options of Google Apps
- Access to proprietary Onix video and written training resources.
- Creation and support of an end user support site. The end user support site will contain training resources, FAQs and other resources.



- Creation and support of a project team site. The project team site is a website for all project artifacts, plans, issue escalation and reporting.
- Guidance in the creation of a communications plan, detailing all communication efforts, timing and responsible parties.
- Guidance in the customization of Onix communication samples and templates

#### **4.0.3.6 PROJECT DELIVERABLES**

##### **4.0.3.6.1 (M) Specify the project deliverables including all of the following:**

- **Project Management;**

"Supported"- Onix Networking will provide a project manager and develop a comprehensive project plan

- **Password Synchronization;**

"Supported"- Onix Networking has custom developed tools to facilitate password syncing between Active Directory and Google Apps.

- **Infrastructure Domain Creation and Setup;**

"Supported"- Onix Networking will assist in the setup of the State's Google Apps instance, as well as provide an Apps for Administrators workshop that will detail all of the administrative functionality in the Google Control Panel.

- **Message Security and Discovery;**

"Supported"- Onix Networking will provide consultation and guidance in the set up of Postini Directory Sync Service as well as consultation and guidance in the setup and various policy controls available with Postini.

- **Infrastructure Mail Routing;**

"Supported"- Onix Networking will provide guidance in the set up of mail routing options and best practices.

- **Mobile Infrastructure Services;**

"Supported"- Google Apps provides freely available mobile interfaces for a wide variety of devices. Additionally, if desired, Onix Networking can work to set up a Blackberry Enterprise Server with connections to Google Apps.

- **User and Global Address List Provisioning and Synchronization;**

"Supported"- Onix Networking will provide guidance in the set up of Google Apps directory sync tools including Shared Contacts and Global Address Lists

- **Calendar Free/Busy and Scheduling Facility;**



"Supported"- Onix Networking will assist in the set up of Free/Busy availability scheduling between users on a domain wide basis.

- **Content Migration Tools;**

"Supported"- Onix Networking will assist in the migration efforts of the early adopter phase users. We will use the freely available GAMME tool to facilitate mail migration. Additionally, if desired, Onix Networking can assist in the implementation of our Groupwise migration tools.

- **Application Email and Calendar Discovery and Coding Modification;**

"Supported"- Onix Networking has the experience with creating supplemental applications, scripts, and add-ons for the Google Apps suite. Google controls the source code of the Google Apps platform.

- **Content Migration – Email, attachments, and archived messages;**

"Supported"- Onix Networking will utilize the GAMME tool to perform mail migrations from Groupwise by utilizing IMAP. Messages with attachments larger than 25MB will not be migrated to Google Apps.

- **Content Migration – Calendar;**

"Supported"- Google does not offer any tools to facilitate server-side Groupwise calendar migrations. Onix Networking has custom developed server-side Groupwise calendar migration tools, which could be used to facilitate a migration at the State of Utah.

- **Content Migration – Contacts;**

"Supported"- Google does not offer any tools to facilitate server-side Groupwise contact migrations. Onix Networking has custom developed server-side Groupwise contact migration tools, which could be used to facilitate a migration at the State of Utah.

- **Account Deactivation Process;**

"Supported"- GADS supports the ability to synchronize account statuses to Google (e.g. Account deactivation and deletion).

- **Communication and Change Management Process;**

"Supported"- See 4.0.3.7.10

- **Integration with the State's Change Management Process;**

"Supported"- See 4.0.3.7.10

- **Help Desk Integration;**



"Supported"- See 4.0.3.7.7

- **Training; and**

"Supported"- See 4.0.3.7.7

- **Problem Escalation Process.**

"Supported"- See 4.0.3.7.8

#### **4.0.3.7 IMPLEMENTATION PHASES and DESCRIPTION**

##### **4.0.3.7.1 (M) Specify and define the proposed project timelines for each project phase and migration option.**

"Supported"- For the proposed project timelines and phases please refer to Attachment D the Onix project timeline and Attachment B Nexic's Statement of Work.

Factors needed to identify the amount of time it will take to journal messages from GroupWise to Postini are:

1. Location of personal archives. It is recommended that you consolidate personal archives and backups to a central location, where we will connect directly to the personal archives and/or post office backups, then journal the data to Postini.

Performance when migrating legacy data from your live GroupWise post offices to Postini can increase significantly by first creating a copy/backup of each post, then configuring our service to connect directly to the backup post office database and journal the data to Postini.

2. Bandwidth. Identify bandwidth between the machine with the migration service/utility, and your internet connection to Postini. Once the data has been retrieved from GroupWise, it needs to be sent over the internet to Postini.
3. Hardware resources. It is recommended that you temporarily dedicate several server class machines for migrating messages in personal archives and post offices to Postini. From the given information in this RFP, if all but the last 90 days of data is journaled to Postini, it is recommended to have a minimum of 5 dedicated/virtual machines running the migration service/utility. These machines are temporary, and will no longer be needed once the migration is completed.

Based on 6TB of data and not knowing bandwidth and volume of users per post office or volume of personal archives and the content in those archives, it would take a minimum of 8 weeks to migrate/journal the archives and historical data to Postini.

This process of journaling the GroupWise messages could be done before or after the live email system has been switched over to GMail. If the journaling to Postini is done before the switch to GMail, users will then have all their archived data available to them in Postini at the time you go live with GMail.

#### **4.0.3.7.2 (M) Specify and define the project initiation phase and related requirements and deliverables**

"Supported"- The project initiation phase will begin with the onsite project kick-off meeting. Onix Networking will work to coordinate the three work stream teams: training and communications, project management, and technical. In addition, work stream leads will be chosen for Onix Networking, as well as corresponding leads and point people for the State of Utah. In addition, we'll set up meetings for each work stream, and discuss design decisions and best practices.

The kick-off meeting will decide the full detailed project plan and timeline with task-based estimates and expectations. Onix Networking will also begin preliminary work on the communications and training plans to be used throughout the various implementation phases.

#### **4.0.3.7.3 (M) Specify and define the project design phase and related requirements and deliverables.**

"Supported"- After the kick off meeting, there will be a 6-week window to allow for development of the communication and training plans, as well as perform any preliminary technical work required for early adopter and mock deployment phases.

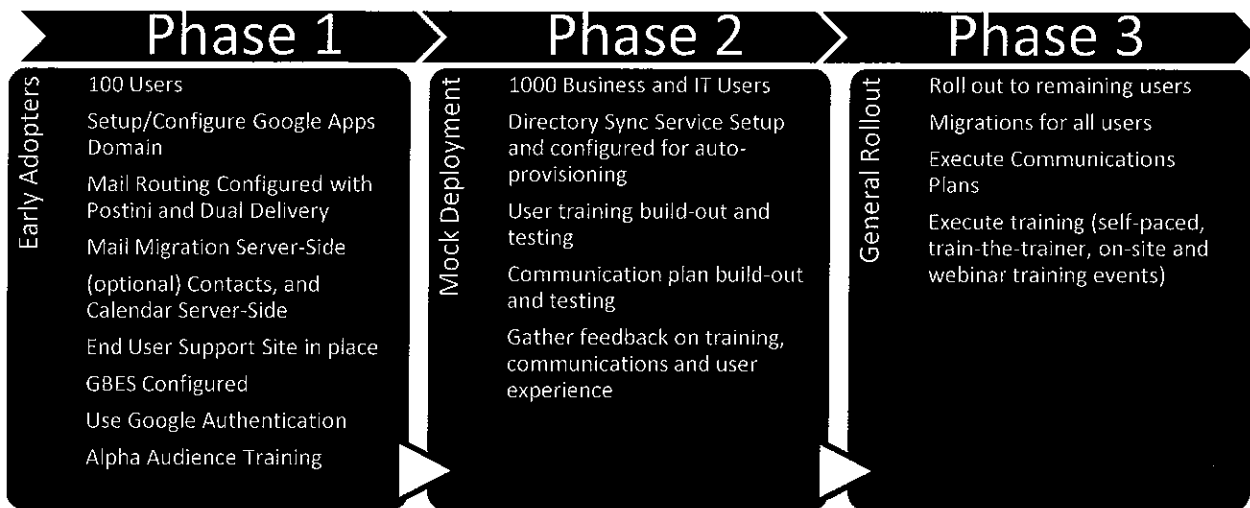
#### **4.0.3.7.4 (M) Specify, define and describe the project development phase and related requirements and deliverables.**

"Supported"- After the development of the communications plan, Onix Networking will assist the State of Utah in the customization of communications material. Onix Networking provides this material in 13 different languages, but translation services are available for any other languages that may be necessary.

#### **4.0.3.7.5 (M) Specify, define and describe the project deployment phase and related requirements and deliverables.**

"Supported"- Onix Networking typically follows a three-phase approach. It is important to note that the methodology used below is the same that was used at dozens of other similar-sized rollouts, thus the model has proven worthy. We have defined three general phases to the rollout. In each phase there will be a preparation part to it and a launch and monitor part to it. So, you will see that reflected in the timelines throughout the proposal. Below is an overview of the phases, scope and timing for a Google Apps rollout at the State of Utah.

Pre-Launch – This phase is noted in the timeline and represents the work Onix and the State will do to prepare for the three phases noted below.



### ***Phase 1 – Early Adopters***

In this phase, we are going to put together the communications, training and technical work plans needed to accomplish the rollout to the target audience in the first phase. We typically break the overall team into three sub-teams to cover these three areas, thus creating parallel work streams. This group will go through training and organizational change management as well to provide feedback on each area so we can make changes as needed, before broadening the audience in Phase 2. In Utah's case, it is recommended that 100 users participate in this phase.

### ***Phase 2 – Mock Deployment***

In this phase, we are going to take lessons learned from the first phase, make changes, and then deploy the solution to a subset of business users across the organization. It is a best practice to have the target audience in this phase made up of various roles and job functions across the organization, so we can test out real-world use cases before moving to a general deployment. This audience will also go through the revised communications and training from Phase 1 to test it before going into a general deployment. In Utah's case, it is recommended that 1000 users participate in this phase

### ***Phase 3 – General Rollout***

For the general deployment, we will work with the State to determine the best agencies to go first and the order of the remaining entities. It is a best practice to move organizations that work together most closely all at once. This minimizes any issues related to coexistence of several systems.

#### **4.0.3.7.6 (M) Specify, define and describe reportable project metrics.**

"Supported"- Onix will produce a weekly status report that lists the following items:

- Accomplishments for the week
- Accomplishments planned for the following week
- Issues and risks that may affect the project's health, timeline or success.
- Timesheet summary for hours worked by Onix resources
- Project health

In addition, Onix will establish regular status meetings with the state to ensure proper communication. These will come in the form of a weekly project team call. The sub-teams



responsible for their own work streams will also hold regular meetings on a more frequent basis. We will hold a project kickoff meeting to remind team members of the roles, responsibilities and escalation points during project execution.

Also, throughout the course of the project, Onix Networking will provide training surveys as part of the communications work stream. These surveys will be used to judge user satisfaction and effectiveness of the training, and ultimately make adjustments as needed. The current feedback surveys are:

- Post-Training Survey
- Training Satisfaction Survey
- Communications Feedback Survey

#### **4.0.3.7.7 (M) Specify, define and describe the go live support deliverables including on-site support, help desk integration and the overall ongoing support plan.**

“Supported”- In this proposal, we have incorporated the following classes to address the various audiences. It should be noted that these classes will be delivered over the phases mentioned in the RFP, so you are seeing the class types below, but you should refer to the project plan to see which classes are delivered at what times and how many times that class will be delivered in each phase.

##### **Apps For End Users**

*Onix Instructor Led – Onsite, Webinar or Pre-Recorded*

This three-hour course is targeted for end-users and covers Google Mail, Google Contacts, and Google Calendar. A fully comprehensive pre-recorded version of this training along with several will be made available on the end user support site

##### **Apps for Executives**

*Onix Instructor Led – On-site*

This 30-45 minute overview is designed to kick start Executives and VIPs in the use of Google Apps. Specialized training materials and attention is provided.

##### **Apps for Executive Assistants**

*Onix Instructor Led – On-site or Webinar*

This additional course is specialized for executive assistants that have already attended an end user training. Executive assistants will learn how to use and set up

##### **Apps for Helpdesk**

*Onix Instructor Led – On-site or Webinar*

This additional course is specialized for helpdesk agents that have already attended an end user training. Helpdesk agents will learn to handle common inbound helpdesk issues, as well as the ability to manage accounts.

##### **Apps for Administrators Workshop**

*Onix Instructor Led – On-site or Webinar*

This is a workshop where we walk through the administrative control panel in Google Apps as well as the generic administrative functions available with Google Apps.

#### 4.0.3.7.8 (M) Specify, define and describe the phased work plan from pilot through go-live implementation.

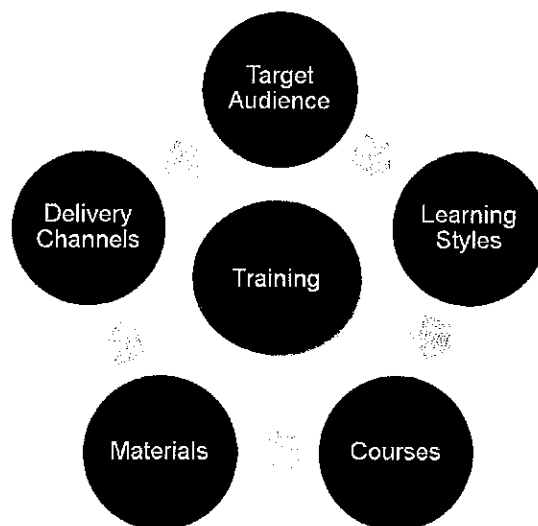
“Supported”- Onix Networking will support the deployment through mock deployment through onsite trainings and successful train-the-trainer sessions. Additionally, Onix and Google will be onsite through the first two days of go-live deployment. On going, post go-live support is offered by Google through an online ticketing system reserved for enterprise customers. For critical issues (P1 Issues), direct phone support is available. Optionally, Onix Networking has the ability to offer comprehensive phone-based support post-deployment.

Onix Networking will support and train the helpdesk staff through the use of responsive training, FAQs and common issues we’ve experiences from other customers. Helpdesk agents will escalate any issues through the local project team, and in-turn to Onix Networking and if necessary, Google. Onix will also provide the custom developed Onix Apps Manager, an add-on designed to selectively give specific user administrative rights to helpdesk agents and other IT staff.

#### 4.0.3.7.9 (M) Specify, define and describe the overall training plan for end users, and trainers, and specify training deliverables that will be provided.

##### TRAINING

“Supported”- Onix has extensive training experience and materials for a Google Apps rollout. Further, Onix has received high marks from customers for the level and quality of training. This is due to the way we approach training. We believe there are several elements to training for a Google Apps rollout which need to be considered and folded into an overall training plan. These elements are listed below.



##### Target Audiences

Typically, we will train several different groups of users. They are Executives, Executive Assistants, End-Users, Help Desk Agents and Google Administrators. We have built out





specific content to address each audience's needs. For example, we have a 3 hour course for End-Users focusing on Mail, Calendar, Contacts and Chat. However, an executive will typically not want to sit through that length and depth for a course. Instead, executives want a one-hour class where you spend thirty minutes providing some highlights or key points about the applications, fifteen minutes on how to work with their Blackberry or mobile device and then a few minutes answering questions. So we have developed materials and techniques to service the different audiences.

### Learning Styles

There are three different learning styles: Visual, Auditory and Kinetic. We incorporate all of these learning styles into our training. This way we are sure to offer students the most robust offering, giving them the best chance to retain the information. For example, we have lab exercises for those kinetic students who like to get their hands on the technology and learn by doing. We offer recorded training and slides for those visual learners. We also have webinars, on-site classes and voice associated with our recorded training, which may appeal to the auditory crowds. It is important to make sure that you have a training solution which addresses all of these areas.

### Courses

In this proposal, we have incorporated the following classes to address the various audiences. It should be noted that these classes will be delivered over the phases mentioned in the RFP, so you are seeing the class types below, but you should refer to the project plan to see which classes are delivered at what times and how many times that class will be delivered in each phase.

Course Name	Target Audience	Delivery Mechanism	Notes
Gmail , GCal and GTalk for the Enterprise	End-Users	<u>On-Site</u> ; Instructor-led	Content covers mail, GTalk, contacts, and GCal.
Gmail , GCal and GTalk for the Enterprise	End-Users	<u>Web</u> ; Instructor-led	Content covers mail, GTalk, contacts, and GCal.
Gmail , GCal and GTalk for the Enterprise	End-Users	Recorded Content available via the intranet	Content covers mail, GTalk, contacts, and GCal. We will post these courses to the End User Support Site.
Google Apps for Executives	Executives	On-Site	This course is an overview of Google Apps lasting 30-45 minutes.
Google Apps for Executive Assistants	Executive Assistants	On-Site or Web	This course is an additional module taken after the End-User training which covers the delegated administration functions in Google.
Google Apps for Administrators	Administrators	Web	This is a workshop where we walk through the administrative control panel in Google Apps.



Google Apps for Help Desk Agents	Help Desk Agents	Web or on site	This is an add-on module to the end-user training where we cover the most commonly asked questions and how to resolve answer/resolve them.
----------------------------------	------------------	----------------	--

### Training Materials

This section details out the training materials for the project. It is important to have these materials available for your employees to ensure they have the best opportunity to learn Google Apps.

Training Materials
GMail Recorded Content
GMail Training Slides
GMail Quick Reference Guide
GMail Lab Exercises
GMail Policy Guideline Template
GCal Recorded Content
GCal Training Slides
GCal Quick Reference Guide
GCal Lab Exercises
GCal Policy Guideline Template
GTalk Recorded Content
GTalk Policy Guideline Template
International GMail, GCal and Chat Materials (Slides & Quick Reference Guides in 13 languages)
Executive Administrator Recorded Content
Executive Course Materials
FAQs, Exchange or GroupWise vs. Google Compare/Contrast Documents
Blackberry & iPhone Guides
Google Docs Training Slides
Google Docs Quick Reference Guide
Google Sites Training Slides
Google Sites Quick Reference Guide

### Delivery Channels

Users have busy schedules and learn at different paces in different ways. Taking this into consideration, we have developed our courses so that they can be delivered in various ways. We offer the following delivery channels.

- On Site, Instructor Led – This is traditional classroom training. Typically, we have 40-50 people in a class, however, we have conducted classes with up to 200 students in an auditorium. The only limiting factors are room size and desired level of interactions with

students. The bigger the class, the fewer questions we are able to take during the presentation to ensure we get through all the materials.

- Webinar, Instructor Led – This is one of the most popular methods for larger rollouts because we can cover a larger audience (up to 1,000 students per class) via a webinar, and it allows students to attend from anywhere they happen to have an internet connection.
- Self-Paced Recordings – We have taken our classes and recorded the content, breaking them down into small, 5-10 minute topics. This allows users to listen to them as they have time and even jump to particular modules for reference instead of having to listen to things they may already know. This is essential to have in any Google Apps rollout because there is usually a large percentage of users who either cannot make the offered training dates/times or who like to do self-paced learning and this provides that avenue for them.
- Labs-Based Learning – In this offering, we set aside time with an instructor to walk through some exercises using the products. The students walk through the exercises and are able to ask the teacher questions along the way. This is very helpful for kinetic learners, however it also costs more than traditional methods because class sizes need to be 40 students or less. This is usually delivered via a virtual classroom on the web, however, we can do them as on site labs too.
- Embedded into a Learning Management System (LMS) – Our materials can be put into your LMS if you want to track student progress and understand what materials have been reviewed by particular students. This is useful for organizations that may already have a training team, LMS system and process by which to use training materials provided by third parties.

In this proposal, we are recommending a combination of Instructor-Led, Webinar and Self-Paced Recordings as indicated by the project plan.

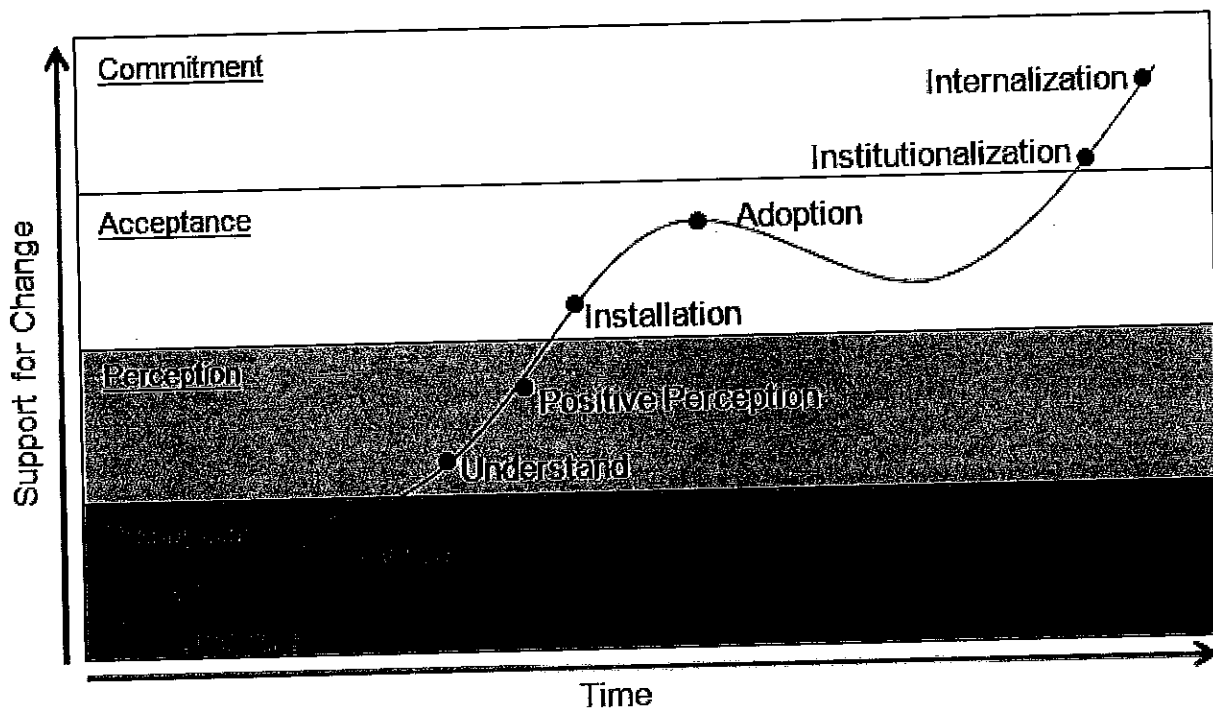
- Alpha Phase (~100 users)
  - 2 Webinars and one onsite end user training
  - 2 Executive one-on-one sessions
  - 1 Executive Assistant webinar
  - 1 Helpdesk webinar workshop
- Mock Deployment (~1000 users)
  - 1 Onsite end user training
  - 1 End user webinar
  - 1 Train the trainer onsite
  - 1 Train the trainer webinar
  - 10 Executive one-on-one sessions
  - 2 Executive assistant webinars
  - 2 Helpdesk webinar workshops

**4.0.3.7.10 (M) Specify, define and describe the organizational change management plan and specify communication deliverables.**

"Supported"- Human change management is always an important part to any technology deployment. In speaking with most executives, this is the most important part to a company-wide rollout of any sort. So, for this project, we will be using tools, templates and best practices collected over the past several years from doing many large rollouts to ensure users adopt the technology and are prepared to use it.

Below is a typical human change management curve when rolling out technology.

## Organizational Change Management Curve



As you can see, there are stages to the way people understand and adopt technology. This is why it is important to develop a communications plan and materials to move people along the curve. For example, there will be a series of events that take place to move someone from an "Unaware" state to the "Aware" state. This will be done through various communications mechanisms, some of which can be email, group meetings, executive messages, tent-cards in common areas, posters, and mass v-mails. Having done this many times, we have expertise in putting the plans together and helping to develop materials suitable to your rollout.



### Setting Goals

During the communications planning, we will meet to discuss several focus areas. The first is setting the objectives for target audiences, communication mechanisms, and locations/facilities in the context of the rollout phases.

## Target Audiences

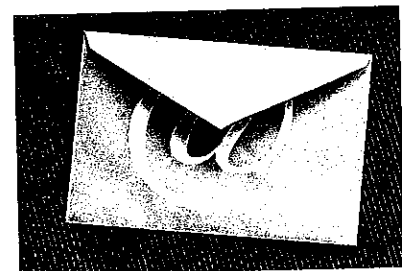
When discussing target audiences, it is important to understand how different employees receive and process information. Communications is rarely a one-size fits all approach, so understanding who you are communicating with and how they consume information is very important. We typically target the following groups for specialized communications: Executives, Executive Assistants, End-Users, Help Desk Agents, Google Guides, Site Coordinators and Field Service individuals. Your organization may have additional groups that need specialized communications. Another factor to consider in communicating is that humans typically need to hear messages seven times for it to stick more than three



weeks. Given our busy schedules and information overload, repeating messages in various forms will help reinforce the things they will need to remember. We also try to use varying methods to communicate including visual, kinetic and auditory since these are the primary learning patterns for humans. Last but not least, is understanding the changing dynamic with regard to how people consider information important. For example, users who frequently use Facebook, Twitter and other social networking tools typically adhere to a meritocracy model when deciding whether something is important or not. This means that they like to know that their peers are using the technology and believe it is worthwhile. Just like you can vote something up or down on the web or review a restaurant real-time through an iPhone application like Yelp. These are not reviews from someone in an authoritative position like a food critic, but instead are normal people weighing in with opinions on whether this place has good food. So, it becomes important to provide and win these "influencers" in the organization to help provide positive input on the rollout.

## Delivery Mechanisms

The next consideration is around communication delivery mechanisms. There are many that each organization uses, so it will be important to tap into the already-established lines within the State. Some examples include email, kiosks in buildings, tent cards in the lunchroom or conference rooms, manager's weekly meetings, monthly newsletters, all-hands conference calls, executive meetings and automated voicemails. There are many more including social networking tools that may be leveraged in any particular rollout. We will use several of the methods mentioned here in this rollout.



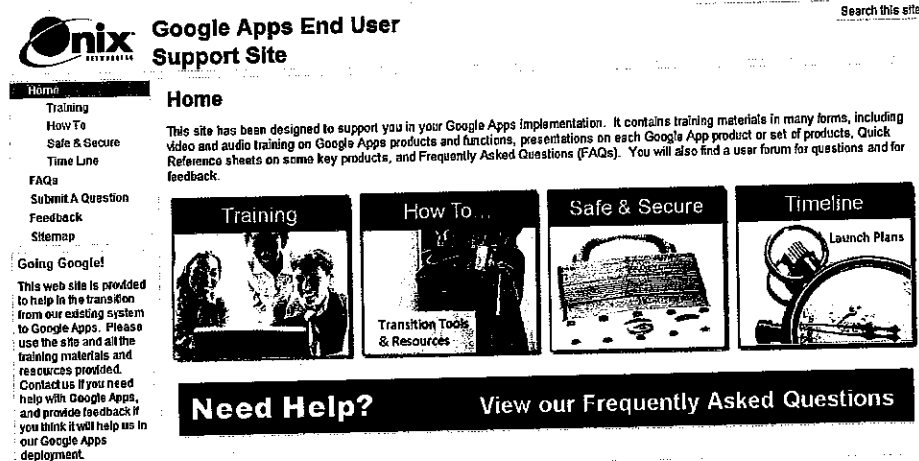
## Project Communications

As part of the rollout, we will want to setup two intranet web sites using Google Sites, which is included in the license costs for Google Apps. The first site is a project team site. This will be where we keep project-related information such as status reports, project team member contact lists, meeting minutes, and any other project-related information relevant for the team working on the rollout.



## End-User Support Site

The second site we will create is the End-User Support Site. This is the web site that will be used as a central knowledge repository for anyone using the Google Apps system. It will contain FAQs, training materials including recorded training, How-To guides, a project timeline and various other pieces of information related to the rollout.



## Other Communication Considerations

The other items that will happen in the communications work stream include end-users surveys of training, communications materials and experiences working with Google Apps. We will also conduct "Ask the Expert" learning sessions as part of the learning effort for the first two weeks after the go-live date. We typically like to take the questions asked in these sessions as input to the FAQs that we will pre-load into the End-User Support Site and also hand to the help desk team so they understand the questions and answers that users will have. The other thing we typically will do is produce a "Tips & Tricks" or best practices email on a regular basis to help users adopt the technology and understand the best ways to utilize the new products.

### 4.0.3.8 REPORTING REQUIREMENTS

**4.0.3.8.1 (M) Provide an overall project management plan that specifies tasks, timelines, and resource requirements. A Gantt chart may meet this requirement.**

"Supported"- Please refer to Attachment D for the Project Plan and time lines.

**4.0.3.8.2 (M) Describe, define, and where practicable provide examples of progress reports and metric reports that would be delivered to the State.**

"Supported"- The following is an example of a progress report that we would provide:



## Weekly Status Report

<b>Customer</b>	ACME Corp		
<b>Project Name</b>	Google Apps		
<b>Week Ending</b>	12.31.2010		
<b>From</b>	Jane Doe, Project Manager		
<b>To</b>	John Smith, IT Directory - ACME Corp		
<b>Project Health</b>		Yellow	
	X		

<b>Project Overview</b>	
<b>Customer Contact</b>	John Smith
<b>Client Email</b>	john.smith@acme.com
<b>Project Description</b>	Implement the Google Apps communications and collaborations suite  Our Success Criteria are: <ul style="list-style-type: none"> <li>• User Adoption</li> <li>• Mobility choices</li> <li>• Increased collaboration</li> </ul>
<b>Project Schedule</b>	1 year from inception

### Key Accomplishments This Week

- Set up GADS against internal domain server.
- Performed several test migrations of legacy data.

### Plans for This Coming Week

- Migrate IT staff to Google Apps
- Conduct onsite training for IT staff

### New Risks Identified

- ACME is in the process of acquiring new Active Directory servers. No downtime anticipated.

### Additional Notes

Bob from the Active Directory team is on vacation



#### **4.0.3.9 STAFF ORGANIZATIONAL STRUCTURE**

##### **4.0.3.9.1 (M) Describe the composition of the team that will support project implementation for the State, and specify lead managers and responsibilities.**

"Supported"- Onix will define a Statement of Work (SOW) with the appropriate SLA, as noted by the State in this RFP. After that fact we will assign resources on the follow basis:

- Project Management – Will overall project management and will coordinate the activities of the technical, communication, change management and training resources. Will be primary contact point for the State's project team.
- Technical Work Stream – Will be responsible for the strategic and tactical technical aspects of the implementation (e.g. Active Directory integration, BES integration, mail and calendar migrations, Global Address List).
- Communications Planning and Change Management – Responsible for every aspect of building the communication plan with the State, and providing the materials for you to customize your plan for implementation.
- Training – Responsible for every aspect of training regardless of onsite, web-based instructor-led, or self-paced learning.

Onix has certified project management personnel and deep expertise in the Google Apps platform. We have proven methodology for success at large organizations, based on the parameters noted above.

#### **4.0.3.10 INTERNAL CONTROL PROCEDURES**

##### **4.0.3.10.1 (M) Describe the process for decision-making and sign-off procedures with State personnel.**

"Supported"- Recommendations will be provided by the sub-team leads through their respective project managers. If necessary, decisions that need to be escalated will go from the project managers to their executive sponsors. Onix will follow the decision-making and sign-off procedures mutually defined by Onix and the State. We work with many large enterprise organizations and each have an internal approval process and sign-off procedures and we will work within these procedures to arrive at an agreeable methodology for the State.

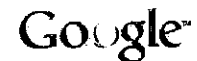
##### **4.0.3.10.2 (M) Describe the processes for tracking and monitoring project changes and revision requests from the State, and how such changes will impact costs and timelines.**

"Supported"- Project tracking is done on a daily basis, with weekly reporting of the status, as noted in 4.0.2.8.2 above. This ensures the project stays on track, and that if any areas of concern arise we can address them immediately. At times we may wish to revise the plan based on the State's resources or desires, and we just need to agree on the time frame and the impact to schedule, if any, of these changes. Any material changes to scope would be managed from the project managers to their executive sponsors for approval. If the change of scope would have impact to the cost or schedule, an estimate will be provided by Onix Networking to the state's executive sponsors for approval.

#### **4.0.3.11 HELP DESK PROCEDURES**

##### **4.0.3.11.1 (M) Describe and define the responsibilities of the Respondent to train and integrate help and training services with existing State Help Desk services.**





"Supported"-During phase 1 of the deployment, Onix Networking will conduct a Google Apps for Helpdesk Agents course. This course will cover common troubleshooting tasks as well as instructions on how to escalate issues.

To mitigate the dependence on the Helpdesk and IT staff, Onix Networking will provide an End User Support and Training Site. This site will be loaded with pre-recorded video training, an FAQ section, how-to guides, and many other resources, including a form to submit a question. The Help Desk will be able to point end users to this resource, and will be able to track any common issues across the spectrum of users. If we need to address any ubiquitous concerns or issues, we can do that through an FAQ or another video, as needed.

#### **4.0.3.12 PROJECT DELAYS**

**4.0.3.12.1 (M) In the event of a project delay, explain the Respondents responsibility for ensuring that sufficient resources will be provided to mitigate delays and costs that go over budget.**

"Supported"- When we generate the statement of work for the implementation, and we organize to start the project, we list out the responsibilities and any risks to the project, from an Onix and State perspective. Delays by customers such as the State usually come in the form of resources who are not available, such as a Subject Matter Expert (SME) on Active Directory, or BES, or some esoteric resource. In these circumstances it will be incumbent on the State to provide an alternative resource, as Onix doesn't "touch" internal data stores or onsite resources such as this. Again, because we have a project plan in place, and a time line of events with personnel assigned, we don't often run into these situations. If we do experience delays, and the delays are a result of Onix not providing a resource or some other fault of Onix, Onix will bear additional costs attributed to the unavailability of these resources.

#### **4.0.3.13 TRANSPORTABILITY**

**4.0.3.13.1 (M) In the event of a failure of the project or a later change to a different vendor, describe the process for transporting and migrating out of the respondent's proposed system.**

"Supported"- If the contract is terminated, Google provides Customer with access to the Customer Data for a period of time and Google will provide the tools necessary for migration. See Section 11.2 of their agreement ("(ii) Google will provide Customer access to, and the ability to export, the Customer Data for a commercially reasonable period of time at Google's then-current rates for the applicable Service;"). Google does not impose any additional costs or penalties for cessation of a contract. Moreover, Google provides a number of free tools, managed by the Google Data Liberation Front team, for migration away from Google Apps. The Google Data Liberation Front is an engineering team at Google whose singular goal is to make it easier for users to move their data in and out of Google products. They do this because we believe that you should be able to export any data that you create in (or import into) a product. We help and consult other engineering teams within Google on how to "liberate" their products. This is their mission statement: Users should be able to control the data they store in any of Google's products. The DLF team's goal is to make it easier to move data in and out. To that end, we have a rich set of api's and tools to allow you to move your data out of Google and to other platforms; either cloud-based or hosted. A list of API's is here:  
<http://code.google.com/googleapps/docs/>.



Additionally, they support standard email protocols such as POP, IMAP and MAPI that making moving your data to and from Google simple. They haven't seen instances of customers moving from one hosted system to another, but it's technically possible and their apis and support for protocols would be the mechanism by which this would be accomplished. The migration tools provided by Google have no cost and customers can work with us to implement the migration processes.



## Tab V- References, Experience and Resumes

### 5.0.1 Experience

**5.0.1.1 (M) The Respondent and/or prime contractor shall have experience in providing and servicing hosted email, communication and collaboration services. These services shall be of approximately the same scope and size, contracting with government entities similar to the State. Describe your company's experience providing similar services as required in this RFP.**

"Supported"- Onix is one of Google's premier partners. Other reseller partners talk about success in the Federal, State and Local market, but Onix was the first GSA Schedule holder for Google Search, Earth, Enterprise, and with Google Apps. Onix has implemented Google Apps at large organizations throughout North America. We meet our goals and objectives and we have satisfied customers.

Tony Bianco, who would be one of the lead executive contact points for the State, led the implementation at DC Government, comprising 37,000 users. Onix implemented at MeadWestvaco (MWV), a 25,000 employee manufacturer with 12,000 Google Apps users. MWV consolidated 11 different email systems from around the world into Google Apps. Tony Bianco led that implementation. Both DC Government and MWV have done video testimonials for Google, and are both viewed as extremely successful Google Apps roll outs.

Every Google Apps deployment has aspects that are similar (e.g. BlackBerry support, Active Directory integration, user provisioning, Google Groups creation, resource naming and loading, migrations, and others). Yet, each is unique in how employees must be approached from a communications, change management and training perspective. Each organization has unique requirements for project team management and communication. Onix exceeds customer expectations in all these areas because we have done a lot of Google Apps implementations, and we cover all the bases when it comes to technical and organizational concerns. Without minimizing the impact and importance of a mission critical application such as messaging (and, too, collaboration), Onix has "been there done that" with larger organizations and with more complex and distributed mail infrastructure. We recognize the State has a multitude of agencies and concerns in different departments, and different requirements throughout the spectrum of groups and subsequent services you offer, and we understand and can manage the complexity.

### 5.0.2 References

**5.0.2.1 (M) The Respondent and/or prime contractor shall provide at least three references where similar services in scope to the requirements of this RFP have been provided. See section 3.2. References must be for clients with current relationships with the Respondent for Hosted Email, Communication, and Collaboration services. Additional references may be submitted, if available. For each reference, the Respondent shall provide the number of users in the environment, a brief description of the project, names of individuals who can be contacted, the position of these individuals, addresses, and current telephone numbers. The Respondent is responsible to assure reference information is current and accurate. At minimum, the State will evaluate the following:**

- a. Agency and user Satisfaction
- b. Management Capabilities (including problem resolution)



- c. Development Capabilities
- d. Interaction with Respondent staff
- e. Training and Change Management from the Respondent
- f. Project Completion within Budgets and Timelines

"Supported"-

**MeadWestvaco (MWV)**

Wietze deVries, Principal IT Architect

501 South 5th Street

Richmond, VA 23219

(804) 327-6289

[wietze.devries@mwv.com](mailto:wietze.devries@mwv.com)

(MWV) 20,000 employees; 13,000 user paper manufacturer located in Glen Allen, VA

*This customer project was run by Tony Bianco and involved the consolidation of 10+ different email systems into Google Mail. The predominant systems were Microsoft Exchange and Lotus Notes, and they have worldwide locations and challenging demographics just as State of Utah has multiple agencies and mail systems.*

*Mel Schaeffer, the VP of IT, recently spoke at the Google Atmosphere conference about their successful roll out and benefits of Google Apps. The following are a few snapshots of his discussion:*

## Who is MWV?



We're the look and feel of the world's most-admired products.



## MWV is a global leader in packaging and packaging solutions

\$6 billion in revenue

20,000 employees worldwide

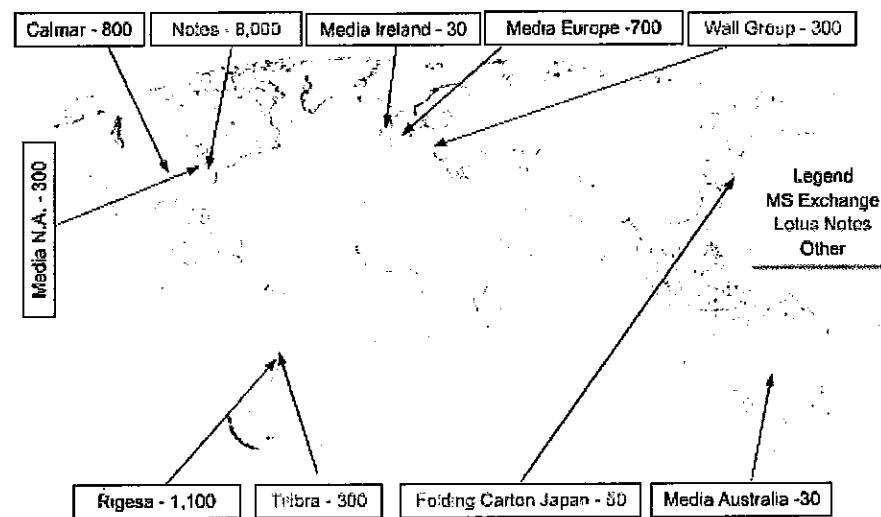
Operations in 30 countries

+45% sales outside North America

25% of revenue from related businesses  
(Specialty Chemicals, Consumer & Office Products, Land Management)

Named to Dow Jones Sustainability World Index

### We consolidated >10 systems into one



## MWV Google Pilot

- Two phase pilot from April 2009 – June 2009
  - Phase 1, 5 associates
  - Phase 2, 110 associates
- All businesses and geographies represented
- Multiple surveys executed
  - Midpoint
  - End
- Results
  - Strong preference for Google email over existing tools
  - Strong collaboration capability within the Google Apps suite
  - Constant stream of innovation from Google
  - 90%+ agree/strongly agree we should move to Google
  - Synchronizing multiple email systems within the domain very difficult
  - Executive Admins are a change management focus
  - Security considerations require policy changes and training for end users

### Summary

- 115 pilot participants
- 80 users "live" on Google
- 12 countries
- 40 functional groups
- 90%+ recommend Google

## Why Google ?

• Replace MWV's 10 current messaging systems with Google Apps (Lotus Notes, Microsoft Outlook, etc.)

- Variabilize our costs for messaging and collaboration
- Standardize email and collaboration tools globally
- Rapid integration of new acquisitions
- Cost Reduction
- Leverage Google's innovation cycle

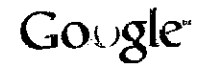
• One MWV == One Messaging and Collaboration system to enable MWV's strategy

- One Messaging system common globally
- Speeds collaboration and innovation across the world

• Partner with the market leader in Web 2.0 technology

- Commanding market share in search, video, and content distribution
- Organizational commitment to transparency and partnership
- Healthy firm with strong financials and security-of-data focus





## What about security?

- We had our Chief Security Officer and Legal team perform the following
  - Review Google security materials / white papers
  - Review Google's SAS-70 certification
  - Review Google's European Safe Harbor certification
  - Follow up with Google staff to clarify data security practices
- We confirmed that the contract says our data belongs to us, not Google
- We set our core Google Apps domain to not allow doc/site sharing outside the company
- We re-emphasized our company's existing Acceptable Use and Information Security policies to employees

## How we did it

- **Technical**
  - Used a series of waves organized by one or more legacy email system (mini – big bangs)
  - Started each wave with mail flow through Postini to legacy system
    - Then at go-live, no migration of mail – just change settings in Postini
  - Integrated user accounts with ID Management system
  - Provisioned users one month in advance (& explain how to sign on)
  - Rebuilt fresh distribution lists (used Google Docs Form to collect data)
- **Communication**
  - Used "rolling thunder" communications – constant & just in time
- **Change Management**
  - Recruited volunteers to be "Google Guides" – give them advance access and training (dual delivery)
  - Used several training channels: in person, webinar, pull from site
  - Monitored user participation and encourage / nag them to sign on at least once
  - Provided on site support for larger sites & 24 hr war room support 3-5 days
- **Migration**
  - Used self-service tool to migrate personal contacts
  - Re-created calendar events manually
  - Left Lotus Notes apps on Domino servers; adapted other apps to SMTP as needed

## What about mobile?

- We piloted with BlackBerry using Google Sync for Contacts & Calendar and the Java client for mail
- We experimented with Android phones and Apple iPhones
- We decided to implement with BlackBerry using the Google Connector on the BlackBerry Enterprise Server (GBES)
  - Needed the added security
    - Remote wipe
    - Enforcement of password & timeout policies on the device
  - Deployed 5 production servers + 1 test server
    - At the time there was limit of 250 users per server
- We are excited about Google development in this area ("mobile console") and are considering future deployment of Android &/or iPhone



## We use Google Docs, Sites & Groups extensively

### Google Docs Wave 2 Rollout Plan

	Date (US EST)	Time (US EST)	Duration	Localized Date	Localized Time	Execution Name / Task	Owner	Completed Date/Time (US EST)
10	11/16/2009 Friday	9:00 AM				Document existing Postnet settings in case we have to revert to them in order to roll out the switch to Gmail. That is, what the Postnet folks use today. Make sure we actually need anything.	ACS - Dawn	11/16/2009 12:15:00
11	11/16/2009 Friday	9:00 AM				Document existing Domino settings in case we have to revert to them in order to roll out the switch to Gmail. Make a backup copy of the NABs - see notes specific to it.	ACS - Dawn	completed 10:00 am
12								
13	11/17/2009 Saturday	8:00 AM				Update mailboxes and access files on OMM servers in Pittsburgh & Eagan Data Centers (Domino sending a backup file for OMM). Possible: Move the following Orgs to under MYAG Mail Org: Wave 2 Domino TetraLink Tiv Toolset	Jim Raleigh	11/17/2009 9:10:00
14	11/17/2009 Saturday	10:00 AM	05			Move the following to MyAG Mail Constants and Central Org: mms corp. (Maves will roll) Catalina (Maves will roll) Then can look at graphs & see connections being established with Google Mail servers. Do one test to send an email to @wave.com - should end up in Google Mail. Start migrating Calendar mailboxes to Google Apps.	ACS - Dawn	11/17/2009 10:15 AM

## Lessons Learned

- **Technical**
  - Dual delivery & calendar interoperability is trouble prone (during pilot)
  - Legacy systems may contain a lot of stale email accounts
  - Migration of calendar events is trouble prone; migration of email takes time & bandwidth
  - BlackBerry activation takes time & can overload local cellular network capacity (better to spread out & "pre-golive" w/ split delivery)
  - User profile info (phone #s, address, ...) needs to be maintained
  - Access & password issues are the most common problems
- **Change Management / Training**
  - Users have a very hard time "getting" conversation threads (you can't do too much training)
  - Getting executive commitment is very important (person-to-person is key; it also helps to be in the pilot, but this creates its own challenges)
  - Exec Admins & Executives need a lot of special attention throughout the project
  - A lot of talent exists "out there" beyond Corporate
  - A variety of communication and training methods are good
  - Communications and training need to consider multi-language requirements
  - "Google Guides" are good for engagement and scaling up training
  - Trained people on site at go-live who walk around and mingle are very useful
- **Project Management**
  - Dual delivery mode is challenging -- once you've completed the pilot, go fast
  - Overlapping waves can cause challenges with bottleneck resources

### Nexteer

Jay McLean, CIO  
3900 E. Holland Rd.  
Saginaw, MI 48601  
989-757-6177  
[Jay.McLean@Nexteer.com](mailto:Jay.McLean@Nexteer.com)

Nexteer is a large automotive supplier located in Saginaw, Michigan with 6,400 Google Apps users who had been using Lotus Notes. Onix ran the implementation for this spin-off from





*Delphi Automotive. It was a challenging environment with a disparate end-user base, with varying skill sets and different geographic locations.*

*Onix ran the project on time and on budget, and delivered every facet of the implementation from technical set up and configuration of the domain, to communication planning, change management and training for end-users, helpdesk, IT, executive administrators and executives.*

*Jay McLean, CIO for the corporation, has credited Onix work as a key factor in the successful roll out of Google Apps within the company.*

---

#### **Antioch University**

*Paul A. Deardorff, System Administrator  
900 Dayton Street  
Yellow Springs, OH 45387  
(937) 769-1887  
[pdeardorff@antioch.edu](mailto:pdeardorff@antioch.edu)*

*Antioch University is located in Yellow Springs, Ohio and has over 10,000 students and faculty located at 5 campuses in 4 different states.*

*Antioch ran FirstClass as their primary mail system, along with a few other systems, and desired to consolidate email on Google Apps. Onix won a competitive bid process over other vendors and helped Antioch with mail migration services, training, general project management, and by writing several custom software products/applications for the University. Onix has been involved with Antioch since May, 2009 and has helped with strategic direction and overall information related to the needs of the University and how to best address them technologically in the area of messaging and collaboration.*

---

#### **University of Nebraska at Omaha- Google Message Security Deployment**

*Andrew Buker, Assistant Director of Information Systems (Program Manager)  
6001 Dodge Street  
Omaha, NE 68182  
(402) 554-2175  
[abuker@unomaha.edu](mailto:abuker@unomaha.edu)*

*Onix has provided and supports 3,500 Postini accounts for Faculty and Staff for use with their email and archiving. We have also routed 13,000 of their student accounts through Postini to Google Apps. The University of Nebraska at Omaha is very satisfied with the solution and our support.*

---

#### **Cinram**

*Andrew Murrey, MCSE - CCSE+ - VCP – NSA, VP of IT Infrastructure - North America  
2255 Markham Road  
Toronto, Ontario  
Canada, M1B 2W3  
(317)707-3377 (Andrew located in Indiana)  
[andrew.murrey@cinram.com](mailto:andrew.murrey@cinram.com)*



*Onix completed the entire scope of this project and continues to support over 5,500 Google Apps for Business and Google Message Discovery users. Our tasks included Technical, Communication and Change Mgmt, and Training and we have managed every aspect of their mail migration, user provisioning, mobility support, Active Directory integration and all the other aspects of their Google Apps deployment.*

---

### **5.0.3 Financials**

**(M) The prime contractor shall provide evidence of financial stability and capability to fund all costs associated with the project implementation plan. This information will be used in the RFP evaluation process, to ensure completeness and accuracy. (Note: This information is for evaluation purposes only. It will be held in confidence to the extent that the law allows.) Information required is the latest two years of audited annual financial statements including:**

- a. Total Revenue**
- b. Net Income**
- c. Total Assets**
- d. Cash Flow**
- e. Financial Ratio Analysis**
- f. Notes to Financial Statements**

**Respondents that are subsidiaries of other companies need to be certain that the financial relationship between the subsidiary and the parent company is adequately explained in the audited statements that are provided. This may be accomplished by subsidiary. Infrastructure vendors are required to meet the financial requirements specified in section 3.3**

"Supported"- The Financial Statements provided in the sealed envelope must be held confidential. We are a privately held firm and these are not public financial statements. This information is '**PROTECTED**'. Please refer to the attached Claim of Business Confidentiality Forms appended to each set of the forms. We have provided a compilation of our financial statements that will provide the information you require. Please note however that our financial statements are not audited. They were prepared by third party accountants, but have not officially been audited.

### **5.0.4 Resumes / Background Checks**

**(M) The Respondent shall provide resumes for each staff member responsible for design, implementation, project management, or other positions relative to the requirements of the RFP. Resumes will include education, experience, license, and/or certifications of each individual. In the event of a change of a staff member during the contract term, the submission of a new resume is required. Any such change is subject to the prior approval of the State; such approval will not be unreasonably withheld.**

"Supported"- Onix is proposing the following personnel to work on the State's implementation and has enclosed their resumes in Attachment C:



- Tony Bianco – President; Onix Google Apps
- Tom Cooper – COO
- Grant McCarthy – Professional Services
- Steve Holly – Professional Services
- Richard Foreman – Professional Services
- Greg Heier – Professional Services
- Derrick Anderson – Professional Services
- Adel Etayem – Professional Services
- Dave Lyon – Professional Services
- Terry Chambers – Professional Services



## **Tab VI- Business Cost Analysis**

### **Business Cost Analysis**

**(M) The business cost analysis is a summary of business costs and must include a five-year summary by year of ongoing costs and general cost categories, including initial implementation and migration non-recurring costs. A unit cost per user, based on 20,000 to 30,000 users must be provided for each of the five years, and an average cost per user over the full five-year life of the project. Any (DR) items that require extra costs should be separately detailed and priced in the cost summaries as optional capabilities.**

"Supported"- Please refer to the tables below. We have provided average unit costs for each line item, in addition to itemizing recurring and onetime costs. In the blue and tan boxes we have also summarized what the total costs would be for 20,000/30,000 users dependant on if 1/10 Year Google Message Discovery is chosen. Note: We have summarized all optional items in separate boxes for 20,000/30,000 users.



## Tab VII- Cost Summaries and Professional Services

### 2.6.1 Cost Summary Table

#### (1) 20,000 USERS – (Unit Costs Rounded)

Description	Unit Cost	Year 1	Year 2	Year 3	Year 4	Year 5
1. Implementation Non Recurring Costs	\$5.48/user	\$109,500	\$0	\$0	\$0	0\$
• Project Management and Deployment	\$1.58/user	\$31,680	\$0	\$0	\$0	0\$
• Email Data Migration	\$0.62/user	\$12,320	\$0	\$0	\$0	0\$
• Calendar/Resources Data Migration	\$0.18/user	\$3,520	\$0	\$0	\$0	0\$
• Address List Data Migration	Included in Directory Svcs	Included in Directory Svcs	\$0	\$0	\$0	0\$
• Integration w/State Directory Services	\$0.52/user	\$10,560	\$0	\$0	\$0	0\$
• State Application Changes	\$0.11/user	\$2,200	\$0	\$0	\$0	0\$
• Employee Training	\$2.47/user	\$49,500				
2. e-Mail/Calendar/Schedule cost per User	\$48.36/user	\$967,200	\$967,200	\$967,200	\$967,200	\$967,200
3. Online Application Suite cost per User	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2
4. Archiving cost per User – 1-YEAR ARCHIVE	\$9.43/user	\$188,600	\$188,600	\$188,600	\$188,600	\$188,600
4a. Archiving cost per User – 10-YEAR ARCHIVE	\$23.94/user	\$478,800	\$478,800	\$478,800	\$478,800	\$478,800
5. e-Discovery cost per User	Included in 4 or 4a	Included in 4 or 4a	Included in 4 or 4a	Included in 4 or 4a	Included in 4 or 4a	Included in 4 or 4a
6. Instant Messaging cost per User	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2
7. Mobile synchronization cost per User	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2
8. BES synchronization cost per User	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2
9. Audio/Video Conferencing cost per User	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2
10. Administrative Tool Costs	\$0	\$0	\$0	\$0	\$0	\$0
11. Added Storage Cost per GB	N/A	N/A	N/A	N/A	N/A	N/A
12. Other Optional Cost Items	N/A	N/A	N/A	N/A	N/A	N/A
• Describe Item and cost basis. <b>GroupWise Archive to Postini Archive; Migration with 1 year support</b>	\$12.72/user	\$288,108	N/A	N/A	N/A	N/A
• Describe Item and cost basis. <b>Google Message Encryption (priced at minimum of only 10,000 users)</b>	\$15/user	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000



<ul style="list-style-type: none"> <li>Describe Item and cost basis</li> </ul> <b>Google Technical Account Manager (TAM)</b>	\$3/user	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
--	----------	----------	----------	----------	----------	----------

## (2) 30,000 USERS – (Unit Costs Rounded)

Description	Unit Cost	Year 1	Year 2	Year 3	Year 4	Year 5
1. Implementation Non Recurring Costs	\$3.65/user	\$109,500	\$0	\$0	\$0	0\$
<ul style="list-style-type: none"> <li>Project Management and Deployment</li> </ul>	\$1.06/user	\$31,680	\$0	\$0	\$0	0\$
<ul style="list-style-type: none"> <li>Email Data Migration</li> </ul>	\$0.41/user	\$12,320	\$0	\$0	\$0	0\$
<ul style="list-style-type: none"> <li>Calendar/Resources Data Migration</li> </ul>	\$0.11/user	\$3,520	\$0	\$0	\$0	0\$
<ul style="list-style-type: none"> <li>Address List Data Migration</li> </ul>	Included in Directory Svcs	Included in Directory Svcs	\$0	\$0	\$0	0\$
<ul style="list-style-type: none"> <li>Integration w/State Directory Services</li> </ul>	\$0.35/user	\$10,560	\$0	\$0	\$0	0\$
<ul style="list-style-type: none"> <li>State Application Changes</li> </ul>	\$0.07/user	\$2,200	\$0	\$0	\$0	0\$
<ul style="list-style-type: none"> <li>Employee Training</li> </ul>	\$1.65/user	\$49,500	\$0	\$0	\$0	0\$
2. e-Mail/Calendar/Schedule cost per User (GAfG)	\$48.36/user	\$1,450,800	\$1,450,800	\$1,450,800	\$1,450,800	\$1,450,800
3. Online Application Suite cost per User	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2
4. Archiving cost per User – 1-YEAR ARCHIVE	\$9.43/user	\$282,900	\$282,900	\$282,900	\$282,900	\$282,900
4a. Archiving cost per User – 10-YEAR ARCHIVE	\$23.94/user	\$718,200	\$718,200	\$718,200	\$718,200	\$718,200
5. e-Discovery cost per User	Included in 4 or 4a	Included in 4 or 4a	Included in 4 or 4a	Included in 4 or 4a	Included in 4 or 4a	Included in 4 or 4a
6. Instant Messaging cost per User	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2
7. Mobile synchronization cost per User	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2
8. BES synchronization cost per User	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2
9. Audio/Video Conferencing cost per User	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2	Included in #2
10. Administrative Tool Costs	\$0	\$0	\$0	\$0	\$0	\$0
11. Added Storage Cost per GB	N/A	N/A	N/A	N/A	N/A	N/A
12. Other Optional Cost Items	N/A	N/A	N/A	N/A	N/A	N/A
<ul style="list-style-type: none"> <li>Describe Item and cost basis.</li> </ul> <b>GroupWise Archive to Postini Archive; Migration with 1 year support</b>	\$12.72/user	\$381,600	N/A	N/A	N/A	N/A
<ul style="list-style-type: none"> <li>Describe Item and cost basis.</li> </ul>	\$15.00/user	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000



Google Message Encryption (prices at minimum of only 10,000 users)						
• Describe Item and cost basis Google Technical Account Manager (TAM)	\$2/user	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000

**(1) TOTAL COSTS 20,000 Users (1-Year Archive):**

	Total – Yr1	User – Yr1	User – Yr2	User – Yr3	User – Yr4	User – Yr5
Per User Services	\$109,500	\$5.48	\$0	\$0	\$0	\$0
e-Mail/Calendar/Schedule cost per User (GAfG)	\$967,200	\$48.36	\$48.36	\$48.36	\$48.36	\$48.36
1-YEAR ARCHIVE	\$188,600	\$9.43	\$9.43	\$9.43	\$9.43	\$9.43
<b>TOTAL – YEAR 1</b>	<b>\$1,265,300</b>	<b>\$1,265,300</b>	<b>\$1,155,800</b>	<b>\$1,155,800</b>	<b>\$1,155,800</b>	<b>\$1,155,800</b>
<b>TOTAL USER – Years 1-5</b>		<b>\$63.27</b>	<b>\$57.79</b>	<b>\$57.79</b>	<b>\$57.79</b>	<b>\$57.79</b>
<b>Average/User 5 years- \$58.89</b>						

**(1) TOTAL COSTS 20,000 Users (10-Year Archive):**

	Total – Yr1	User – Yr1	User – Yr2	User – Yr3	User – Yr4	User – Yr5
Per User Services	\$109,500	\$5.48	\$0	\$0	\$0	\$0
e-Mail/Calendar/Schedule cost per User (GAfG)	\$967,200	\$48.36	\$48.36	\$48.36	\$48.36	\$48.36
10-YEAR ARCHIVE	\$478,800	\$23.94	\$23.94	\$23.94	\$23.94	\$23.94
<b>TOTAL – YEAR 1</b>	<b>\$1,555,500</b>	<b>\$1,555,500</b>	<b>\$1,446,000</b>	<b>\$1,446,000</b>	<b>\$1,446,000</b>	<b>\$1,446,000</b>
<b>TOTAL USER – Years 1-5</b>		<b>\$77.78</b>	<b>\$72.30</b>	<b>\$72.30</b>	<b>\$72.30</b>	<b>\$72.30</b>
<b>Average/User 5 years- \$73.40</b>						

**(1) TOTAL OPTIONAL COSTS 20,000 Users:**

	Total – Yr1	User – Yr1	User – Yr2	User – Yr3	User – Yr4	User – Yr5
GroupWise Archive to Postini Archive; Migration with 1 year support	\$288,108	\$12.72	\$0	\$0	\$0	\$0
Google Message Encryption (prices at minimum of only 10,000 users)	\$150,000	\$15	\$15	\$15	\$15	\$15
Google Technical Account Manager (TAM)	\$60,000	\$3	\$3	\$3	\$3	\$3
<b>TOTAL – YEAR 1</b>	<b>\$498,108</b>	<b>\$498,108</b>	<b>\$210,000</b>	<b>\$210,000</b>	<b>\$210,000</b>	<b>\$210,000</b>
<b>TOTAL USER – Years 1-5</b>		<b>\$30.72</b>	<b>\$18.00</b>	<b>\$18.00</b>	<b>\$18.00</b>	<b>\$18.00</b>
<b>Average/User 5 years- \$20.55</b>						

**(2) TOTAL COSTS 30,000 Users (1-Year Archive):**

	Total – Yr1	User – Yr1	User – Yr2	User – Yr3	User – Yr4	User – Yr5
Per User Services	\$109,500	\$3.65	\$0	\$0	\$0	\$0
e-Mail/Calendar/Schedule cost per User (GAfG)	\$1,450,800	\$48.36	\$48.36	\$48.36	\$48.36	\$48.36
1-YEAR ARCHIVE	\$282,900	\$9.43	\$9.43	\$9.43	\$9.43	\$9.43



<b>TOTAL – YEAR 1</b>	<b>\$1,843,200</b>	<b>\$1,843,200</b>	<b>\$1,733,700</b>	<b>\$1,733,700</b>	<b>\$1,733,700</b>	<b>\$1,733,700</b>
<b>TOTAL USER – Years 1-5</b>		<b>\$61.44</b>	<b>\$57.79</b>	<b>\$57.79</b>	<b>\$57.79</b>	<b>\$57.79</b>
<b>Average/User 5 years- \$58.52</b>						

**(2) TOTAL COSTS 30,000 Users (10-Year Archive):**

	<b>Total – Yr1</b>	<b>User – Yr1</b>	<b>User – Yr2</b>	<b>User – Yr3</b>	<b>User – Yr4</b>	<b>User – Yr5</b>
Per User Services	\$109,500	\$3.65	\$0	\$0	\$0	\$0
e-Mail/Calendar/Schedule cost per User (GafG)	\$1,450,800	\$48.36	\$48.36	\$48.36	\$48.36	\$48.36
10-YEAR ARCHIVE	\$718,200	\$23.94	\$23.94	\$23.94	\$23.94	\$23.94
<b>TOTAL – YEAR 1</b>	<b>\$2,278,500</b>	<b>\$2,278,500</b>	<b>\$2,169,000</b>	<b>\$2,169,000</b>	<b>\$2,169,000</b>	<b>\$2,169,000</b>
<b>TOTAL USER – Years 1-5</b>		<b>\$75.95</b>	<b>\$72.30</b>	<b>\$72.30</b>	<b>\$72.30</b>	<b>\$72.30</b>
<b>Average/User 5 years- \$73.03</b>						

**(2) TOTAL OPTIONAL COSTS 30,000 Users:**

	<b>Total – Yr1</b>	<b>User – Yr1</b>	<b>User – Yr2</b>	<b>User – Yr3</b>	<b>User – Yr4</b>	<b>User – Yr5</b>
GroupWise Archive to Postini Archive; Migration with 1 year support	\$381,600	\$12.72	\$0	\$0	\$0	\$0
Google Message Encryption (prices at minimum of only 10,000 users)	\$150,000	\$15	\$15	\$15	\$15	\$15
Google Technical Account Manager (TAM)	\$60,000	\$2	\$2	\$2	\$2	\$2
<b>TOTAL – YEAR 1</b>	<b>\$591,600</b>	<b>\$591,600</b>	<b>\$210,000</b>	<b>\$210,000</b>	<b>\$210,000</b>	<b>\$210,000</b>
<b>TOTAL USER – Years 1-5</b>		<b>\$29.72</b>	<b>\$17</b>	<b>\$17</b>	<b>\$17</b>	<b>\$17</b>
<b>Average/User 5 years- \$19.55</b>						

The totals noted above in the table include a \$100,000 Google Apps Acceleration Fund contribution from Google to the State of Utah. These funds have been used to decrease the value of the one-time services by \$100,000 in the 20,000 and 30,000 user cases, respectively.

If the State would like to consider a 3-year contract for the user license fees, paid upfront, Onix will agree to provide the State with forty-two (42) months of service for the price of thirty-six (36) months.

**Cost Summaries**

**(M) Pricing information should clearly indicate the costs to provide all of the required qualifications from Section 3.0 through 5.0. Respondents may optionally provide a separate pricing schedule to provide features and services for other desirable capabilities. Where required items are dependent on other optional capabilities, these dependencies should be clearly identified.**

**Pricing should be provided to support guaranteed uptime of 99.9%, based on a 24/7/365 schedule. The infrastructure vendor and prime contractor should specify any hardware, operating practices, or configuration requirement to meet the required service level.**

Please refer to costs itemized above.





#### **Consulting and Development Services Rates**

**(M) Agency Partners may desire to use the Respondent for other related application modifications to support email and calendaring currently implemented within agency applications. Responses to this RFP must include hourly rates by job specialty for use by Agency Partners for these types of coding services and consulting throughout the contract period. The hourly rates should be a fully burdened rate that includes labor, per diem, travel, overhead, and any other costs related to the service. The specific rate (within a range) charged for each proposed contracted service would be the lowest rate shown unless justified in writing and approved by DTS.**

Onix charges one rate for all implementation personnel, which is \$220 per hour, and which represents the fully-burdened cost of the services.



## Tab VIII- Exceptions

We accept the State and DTS Terms and Conditions however we have a few items that we would like to expound on:

**13. TERMINATION: 'This contract may be terminated without cause, in advance of the specified expiration date, by either party, upon sixty (60) days prior written notice being given the other party.'**

Onix proposes that the State of Utah purchase Google Apps for Government and Google Message Discovery (Postini GMD) from Onix Networking, as an Authorized Google Apps Reseller. "User Licenses" means the hosted services known as Google Apps for Government and Google Message Discovery, as proposed by Onix in this response to the RFP. User Licenses are sold on a per user basis, per twelve (12) month term, and may only be terminated with sixty (60) days written notice prior to the start of a new term. Fees for User Licenses are payable in advance and are non-refundable.

The State of Utah may reuse User Licenses for any terminated or deleted accounts, but may not exceed the number of User Licenses licensed for the domain. New User Licenses may be added at any time, through written notice to Onix, and will be charged to the State of Utah on a pro-rated fee schedule based upon the unused portion of the license term, so that all licenses are coterminous on the anniversary date of the awarded contract.

There are two license agreements that we would require from the state, one for Google Apps and one for Postini. Upon first login to Google Apps service, you will be required to accept Google Apps for Government via Reseller Agreement. Please refer to Attachment A for the Onix Customer Agreement and Google's TOS.

**14. NONAPPROPRIATION OF FUNDS: 'the State may terminate this contract or proportionately reduce the services and purchase obligations from the State upon 30 days written notice.'**

Please refer to the above explanation.

**16. WARRANTY: The Contractor agrees to warrant and assume responsibility for all products (including hardware, firmware, and/or software products) that it licenses, contracts, or sells to the State of Utah under this contract for a period of one year, unless otherwise specified and mutually agreed upon elsewhere in this contract.**

The core services are provided by Google, and the warranties which Google offers are noted in the Google Apps for Government Terms of Service. Onix provides no warranty on the Google services, as noted below:

### Warranty for Postini

GOOGLE MAKES NO WARRANTIES OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, ANY EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, ACCURACY OR NON-INFRINGEMENT. TO THE EXTENT ANY



EXCLUSION OF IMPLIED WARRANTIES DOES NOT APPLY AS A MATTER OF LAW, THEN ANY IMPLIED WARRANTIES ARE LIMITED IN DURATION TO NINETY (90) DAYS FROM THE EFFECTIVE DATE.

Warranty for Google Apps

EXCEPT AS EXPRESSLY PROVIDED FOR HEREIN, NEITHER PARTY MAKES ANY OTHER WARRANTY OF ANY KIND, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR USE AND NONINFRINGEMENT. GOOGLE MAKES NO REPRESENTATIONS ABOUT ANY CONTENT OR INFORMATION MADE ACCESSIBLE BY OR THROUGH THE SERVICE. THE SERVICE IS NEITHER DESIGNED NOR INTENDED FOR HIGH RISK ACTIVITIES. CUSTOMER ACKNOWLEDGES THAT THE SERVICES ARE NOT A TELEPHONY SERVICE AND THAT THE SERVICES ARE NOT CAPABLE OF PLACING OR RECEIVING ANY CALLS, INCLUDING EMERGENCY SERVICES CALLS, OVER PUBLICLY SWITCHED TELEPHONE NETWORKS.

Warranty for our Consultation Services

Onix agrees to fix free of charge or refund payments on any consulting hours which do not meet the agreed upon consulting specifications of the State, and which the State has not accepted as completed. Onix limits the liability of the sum total of these fixes or refunds to 20% of the overall Statement of Work Value.



## **Section IX- Confidential Information**

The Financial Statements provided in Section VI (sealed and physically located in back of binder) must be held confidential. We are a privately held firm and these are not public financial statements.



## Onix Networking Government Customer Agreement

Google Apps for Government and Google Security and Compliance (Postini)

This Agreement, including all Exhibits attached hereto or referenced herein, (the "Agreement") is entered into by and between Onix Networking Corporation, an Ohio corporation, with offices at 26931 Detroit Road, Westlake, Ohio 44145 ("Onix") and \_\_\_\_\_, with offices located at \_\_\_\_\_, hereinafter referred to as ("Customer"). Onix and \_\_\_\_\_ are sometimes referred to collectively herein as the "Parties" and individually as a "Party." This Agreement is effective as of the date signed by both parties (the "Effective Date").

WHEREAS, Onix is an authorized Google Apps and Google Security and Compliance ("Postini") Reseller; and Customer wishes to license Google Apps for Government and/or Postini;

NOW, THEREFORE, Onix and Customer hereby agree as follows:

1. **User Licenses.** "User Licenses" means the Google hosted services currently known as "Google Apps for Government" and/or "Postini" (as the services may be renamed from time to time) provided by Google and used by Customer under this agreement.
  - 1.1. "Users" mean employees of Customer authorized by Customer to access the User Licenses. User Licenses are sold by Onix on a per User, per year basis. "User License Fees" are the fees charged by Onix per User, multiplied by the number of Users as specified in the Onix Networking Services Schedule (Exhibit A).
  - 1.2. User Licenses will be delivered to Customer in electronic format. The User Licenses shall be deemed accepted by Customer upon provisioning of the Customer domain with the specified number of User Licenses, or upon the Effective Date of this Agreement, whichever occurs first.
  - 1.3. Customer agrees to comply with the terms and conditions of the Acceptable Use Policy ("AUP") as published or posted on the website at [http://www.google.com/a/help/intl/en/admins/use\\_policy.html](http://www.google.com/a/help/intl/en/admins/use_policy.html) and as may be periodically amended.
2. **Google Apps License.** Customer agrees to comply with the terms and conditions of, and execute the "Google Apps for Government via Reseller Agreement" when Google Apps for Government Licenses are purchased as specified in the Onix Networking Services Schedule (Exhibit A).
3. **Google Security and Compliance (Postini) License ("Services").** Customer agrees to comply with the terms and conditions contained in Exhibit B when Google Security and Compliance (Postini) Licenses are purchased as specified in Exhibit A.
4. **Professional Services.** "Professional Services" means the Google Apps and Postini professional services and training provided by Onix as specified in the Onix Networking Services Schedule (Exhibit A). Onix will provide to Customer each Professional Service specified in the Onix Networking Services Schedule.
5. **Term.** The initial term of this Agreement shall be twelve (12) months beginning on the Effective Date (the "Initial Term"). Thereafter, this Agreement shall be renewed automatically for consecutive renewal terms of twelve (12) months (such renewal terms together with the Initial Term, the "Term"), unless terminated by either party (effective as of the end of the then current term) by written notice thirty (30) days prior to the end of the applicable Term.
6. **Fees and Billing.** Onix will bill Customer for the User License Fees and Professional Services (the "Total Fees") as specified in the Onix Networking Services Schedule on or after the Effective Date.
  - 6.1. All User Licenses Fees are binding and final as of the Effective Date. All User License Fees are non-refundable for any Term.
  - 6.2. Total Fees are due thirty (30) days from the effective date. All payment due are in U.S. dollars. Customer is responsible for any and all applicable U.S. taxes (other than Onix's income tax) associated with the Total Fees.
  - 6.3. Onix may revise its fees (including, but not limited to the User License Fee) with at least thirty (30) days prior written notice to Customer, effective for the following term.
7. **Force Majeure.** Onix shall not be liable for inadequate performance of its obligations under the Agreement to the extent caused by a circumstance beyond its reasonable control, including, without limitation, Domain Name Server issues outside its direct control, labor strikes or shortages, riots, insurrection, fires, flood, storm, explosions, acts of God, war, terrorism, governmental action, labor conditions, earthquakes and material shortages.

By signing below the parties acknowledge that they have received, understood and agreed to, in a legally binding manner, all components of the Agreement.

Customer:

Signature \_\_\_\_\_

Print Name \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Onix Networking Corp.

Signature \_\_\_\_\_

Print Name \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

## Exhibit A Onix Networking Services Schedule

Date		Customer		
Billing Information		Customer Contact Information		
Name		Name		
Address		Address		
Telephone		Telephone		
Email		Email		
Activation Email		Contract Term		
Domain Name		Onix Rep		
Please check one		<input type="checkbox"/> Purchase Order # <input type="checkbox"/> Purchase Order Not Required		
User Licenses				
Description	(Annual) Unit Price	# Users/Mailboxes	(Annual) Total	
		Total User License Fees		
Professional Services				
Description	Price	Quantity	Total	
		Total Services Fees		
		Total User License & Services Fees		
Services Billing Terms:				
Notes:				

## Exhibit B

### Google Security and Compliance (Postini) License ("Services") Terms

Customer is and will remain solely responsible for complying with all laws, rules and regulations regarding the management and administration of its electronic messaging system. Customer acknowledges and agrees that Onix's and its supplier's responsibilities and liability do not extend to the internal management or administration of Customer's electronic messaging system or messages and that Onix and its supplier is merely a data-processor.

2. Customer will establish an email account in Google's identity management systems for each End User for which Customer will be routing email or archiving email, if any, through the Google system.
3. "Overage Charge" means, where the number of destination email boxes for which a Customer enabled and/or actually routed messages through Google's system during the preceding calendar month exceeds the quantity entered on the Onix Networking Services Schedule ("Excess Mailboxes"), the amount calculated by multiplying (A) the Excess Mailboxes by (B) 1/12 of the User License Fee per mailbox. Customer is responsible for all Overage Charges. Overage Charges, if any, will be invoiced monthly in arrears and are due upon receipt of invoice.
4. Customer agrees that it shall not resell the Services or create or offer derivative versions of the Services either directly or through a third party.
5. If the Services contain archiving functionality: (a) Google will retain the Customer emails subject to the Services for up to the period contained in the name of the Services, as set forth in Exhibit A; but only if (b) Customer renews the applicable Services with Onix for each year of the retention period. The retention period will apply to all data archived under the Services. Customer's failure to renew the applicable Services during the retention period will terminate any obligation of Onix or Google to retain Customer's corresponding emails or indexes.
6. Customer may only purchase Google Message Encryption if Customer is also purchasing Google Message Security or Google Message Discovery. Google Message Encryption Services are for use with normal business messaging traffic only and may not be used for any other purpose, including use of the services with machine generated message encryption and delivery.
7. If Customer is purchasing the Email Processing Services, then Onix warrants that the Email Processing Services will meet the requirements set forth in the Service Level Agreement below.

### **Service Level Agreement**

1. **Service Availability Commitment.** The Email Processing Services shall be operational at least 99.999% of the time in any given month during the term of the Agreement. The "Operational Percentage" means the percentage of the total time during any given month that the Email Processing Services are not subject to an Outage. An outage ("Outage") means that Provider fails to apply filtering in accordance with Customer's configuration selection. Outage does not include service suspension (i) for reasons outside of Provider's sphere of control (as described in Section 4 of this SLA) or (ii) during times of maintenance (as described in Section 5 of this SLA). If a dispute arises about whether or not an Outage occurred, Provider shall make a determination in good faith based on its system logs, monitoring reports and configuration records, which Provider shall make available for auditing by Customer at Customer's request. The "Outage Percentage" means the total duration of an Outage during a given month divided by the total time during such month.
2. **Outage Reporting Process.** Customer must inform Provider's Customer Support Department in writing or by email within ten (10) business days of the time it first notices an Outage or first believes that there has been an Outage. Failure to comply with this requirement will forfeit Customer's right to receive a remedy for the Outage as described in Section 3 of this SLA.
3. **Remedy.** If the Operational Percentage is less than 99.999%, and if Customer has fulfilled all of its obligations under the Agreement and none of the exceptions in Section 4 of this SLA applies, Customer shall have the following sole and exclusive remedy: Onix will provide Customer with a pro-rata credit on Customer's Email Processing Services fee for the month in which the Outage occurred. The pro-rata credit shall be calculated by multiplying the Outage Percentage with Customer's total monthly Email Processing Services fee to Onix in the month during which the Outage occurred. Furthermore, if Customer experiences one (1) or more Outage in each of three (3) consecutive calendar months and/or three (3) or more Outages in any period of thirty (30) consecutive days, Customer can terminate the Contract for cause upon thirty (30) days prior written notice.
4. **Exceptions.** Customer shall not have any remedies under the Agreement, including this SLA, in connection with any circumstance addressed in Section 7, "Force Majeure" of the Services Contract.
5. **Maintenance.** To ensure optimal performance of the Services, Provider reserves the right to perform unscheduled emergency maintenance at any time. Additionally, Provider reserves the right to perform scheduled maintenance that is designed not to impact the Services at any time. Provider will make all reasonable attempts to schedule maintenance events that are expected to have an impact on the Services between 10:00 p.m. Pacific Time on Fridays and 12:00 p.m. Pacific Time on Sundays.

## Google Apps for Government via Reseller Agreement

This Google Apps for Government via Reseller Agreement (the "Agreement") is entered into by and between Google Inc., a Delaware corporation, with offices at 1600 Amphitheatre Parkway, Mountain View, California 94043 ("Google") and ENTER CUSTOMER'S FULL LEGAL NAME, a ENTER TYPE OF ENTITY formed under the laws of ENTER STATE/JURISDICTION with an address at ENTER CUSTOMER ADDRESS ("Customer"). This Agreement will be effective as of the date signed by Google below (the "Effective Date"). This Agreement governs Customer's access to and use of the Service.

### 1. Services.

- 1.1 Facilities. All facilities used to store and process Customer Data will adhere to reasonable security standards no less protective than the security standards at facilities where Google stores and processes its own information of a similar type. Google has implemented at least industry standard systems and procedures to ensure the security and confidentiality of Customer Data, protect against anticipated threats or hazards to the security or integrity of Customer Data, and protect against unauthorized access to or use of Customer Data.

- 1.2 Data Location and Storage. As part of providing the Services Google will store the following data, while at rest, in the following regions:

- a. United States: GMail Data and Calendar Data. GMail Data and Calendar Data will be stored: (a) in servers dedicated to the Google Apps for Government Services; and (b) stored on encrypted drives using full disk encryption.
- b. United States and the European Union: Sites Data and Docs Data.
- c. Any country where Google maintains a data center: All Customer Data not set forth in 1.2(a) or (b) above, including, but not limited to, Contacts Data, Login Data, and Profile Data.

- 1.3 Federal Information Security Management Act (FISMA). Google has received an "Authorization to Operate the Google Apps Core Services" based on FISMA Moderate Level by the General Services Administration. Google will continue to maintain a System Security Plan (SSP) for the Services, based on NIST 800-53 Rev3, or a similarly applicable standard. If Google does not maintain this SSP as stated, Customer's sole and exclusive remedy, and Google's entire liability, will be Customer's ability to terminate the Agreement upon thirty days prior written notice.

### 1.4 Modifications.

- a. To the Services. Google may make commercially reasonable changes to the Services, from time to time. If Google makes a material change to the Services, Google will inform Customer, provided that Customer has subscribed with Google to be informed about such change.
- b. To URL Terms. Google may make commercially reasonable changes to the URL Terms from time to time. If Google makes a material change to the URL Terms, Google will inform Customer by either sending an email to the Notification Email Address or alerting Customer via the Admin Console, or will alert Reseller. If the change has a material adverse impact on Customer and Customer does not agree to the change, Customer must so notify Google via the Help Center within thirty days after receiving notice of the change. If Customer notifies Google as required, or Reseller notifies Google on Customer's behalf, then Customer will remain governed by the terms in effect immediately prior to the change until the end of the then-current term for the affected Services. If the affected Services are renewed, they will be renewed under Google's then current URL Terms.

- 1.5 Customer Domain Name Ownership. Prior to providing the Services, Google or Reseller may verify that Customer owns or controls the Customer Domain Names. If Customer does not own, or control, the Customer Domain Names, then Google will have no obligation to provide Customer with the Services.

### 1.6 Ads.

- a. Default Setting. The default setting for the Services is one that does not allow Google to serve Ads. Customer or Reseller may change this setting in the Admin Console, which constitutes Customer's authorization for Google to serve Ads. If Customer or Reseller enables the serving of Ads, it may revert to the default setting at any time and Google will cease serving Ads.
- b. Generally. Ads will comply with the AdWords Guidelines. Except as stated otherwise under this Agreement, Google will neither contact the End Users directly through email, nor authorize a third party to contact the End Users directly by email, for advertising purposes. If Google is authorized to serve Ads, any revenue generated from the display of Ads will be retained by Google and will not be subject to any revenue sharing.

### .. Customer Obligations.

- 2.1 Compliance. Customer will use the Services in accordance with the Acceptable Use Policy. Google may make new applications, features or functionality available from time to time through the Services, the use of which may be contingent



upon Customer's agreement directly or through Reseller to additional terms. Customer agrees that its use of the Domain Service is subject to its compliance with the Domain Service Terms.

- 2.2 Aliases. Customer or Reseller is solely responsible for monitoring, responding to, and otherwise processing emails sent to the "abuse" and "postmaster" aliases for Customer Domain Names but Google may monitor emails sent to these aliases for Customer Domain Names to allow Google to identify Services abuse.
- 2.3 Customer Administration of the Services. Customer may specify one or more Administrators through the Admin Console who will have the rights to access Admin Account(s) and to administer the End User Accounts. Customer and Reseller are responsible for: (a) maintaining the confidentiality of the password and Admin Account(s); (b) designating those individuals who are authorized to access the Admin Account(s); and (c) ensuring that all activities that occur in connection with the Admin Account(s) comply with the Agreement. Customer agrees that Google's responsibilities do not extend to the internal management or administration of the Services for Customer and that Google is merely a data-processor.
- 2.4 End User Consent. Customer's Administrators may have the ability to access, monitor, use, or disclose data available to End Users within the End User Accounts. Customer will obtain and maintain all required consents from End Users to allow: (i) Customer's access, monitoring, use and disclosure of this data and Google providing Customer with the ability to do so, and (ii) Google to provide the Services.
- 2.5 Unauthorized Use. Customer will use commercially reasonable efforts to prevent unauthorized use of the Services, and to terminate any unauthorized use. Customer or Reseller will promptly notify Google of any unauthorized use of, or access to, the Services of which it becomes aware.
3. Requesting End User Accounts; Services Term. Requesting End User Accounts, as well as initial and renewal terms for the Services, are to be decided upon between Customer and Reseller.
4. Payment. Customer will pay Reseller for the Services. As a result, all payment terms are to be decided upon between Customer and Reseller.
5. Technical Support Services.
- 5.1 By Customer. Customer or Reseller will, at its own expense, respond to questions and complaints from End Users or third parties relating to Customer's or End Users' use of the Services. Customer or Reseller will use commercially reasonable efforts to resolve support issues before escalating them to Google.
- 5.2 By Google. If Customer or Reseller cannot resolve a support issue consistent with the above, then Customer or Reseller (as applicable based on the agreement between Google and Reseller) may escalate the issue to Google in accordance with the TSS Guidelines. Google will provide TSS to Customer or Reseller (as applicable) in accordance with the TSS Guidelines.
6. Suspension.
- 6.1 Of End User Accounts by Google. If Google becomes aware of an End User's violation of the Agreement, then Google may specifically request that Customer Suspend the applicable End User Account. If Customer fails to comply with Google's request to Suspend an End User Account, then Google may do so. The duration of any Suspension by Google will be until the applicable End User has cured the breach which caused the Suspension.
- 6.2 Emergency Security Issues. Notwithstanding the foregoing, if there is an Emergency Security Issue, then Google may automatically Suspend the offending use. Suspension will be to the minimum extent and of the minimum duration required to prevent or terminate the Emergency Security Issue. If Google Suspends an End User Account for any reason without prior notice to Customer, at Customer's request, Google will provide Customer the reason for the Suspension as soon as is reasonably possible.
7. Confidential Information.
- 7.1 Obligations. Each party will: (a) protect the other party's Confidential Information with the same standard of care it uses to protect its own Confidential Information; and (b) not disclose the Confidential Information, except to Affiliates, employees and agents who need to know it and who have agreed in writing to keep it confidential. Each party (and any Affiliates, employees and agents to whom it has disclosed Confidential Information) may use Confidential Information only to exercise rights and fulfill its obligations under this Agreement, while using reasonable care to protect it. Each party is responsible for any actions of its Affiliates, employees and agents in violation of this Section.
- 7.2 Exceptions. Confidential Information does not include information that: (a) the recipient of the Confidential Information already knew; (b) becomes public through no fault of the recipient; (c) was independently developed by the recipient; or (d) was rightfully given to the recipient by another party.
- 7.3 Required Disclosure. Each party may disclose the other party's Confidential Information when required by law but only after it, if legally permissible: (a) uses commercially reasonable efforts to notify the other party; and (b) gives the other party the chance to challenge the disclosure.

7.4 Third Party Requests. Customer is responsible for responding to Third Party Requests. Google will, to the extent allowed by law and by the terms of the Third Party Request: (a) promptly notify Customer of its receipt of a Third Party Request in a manner permitted by law; (b) comply with Customer's reasonable requests regarding its efforts to oppose a Third Party Request; and (c) provide Customer with the information or tools required for Customer to respond to the Third Party Request. Customer will first use the Admin Tool to access the required information, and will contact Google only if it is insufficient for Customer's needs.

## 8. Intellectual Property Rights; Brand Features.

8.1 Intellectual Property Rights. Except as expressly set forth herein, this Agreement does not grant either party any rights, implied or otherwise, to the other's content or any of the other's intellectual property. As between the parties, Customer owns all Intellectual Property Rights in Customer Data, and Google owns all Intellectual Property Rights in the Services.

8.2 Display of Brand Features. Google may display only those Customer Brand Features authorized by Customer (such authorization is provided by Customer uploading its Brand Features into the Services), and only within designated areas of the Service Pages. Customer may specify the nature of this use using the Admin Console. Google may also display Google Brand Features on the Service Pages to indicate that the Services are provided by Google. Neither party may display or use the other party's Brand Features beyond what is allowed in this Agreement without the other party's prior written consent.

8.3 Brand Features Limitation. Any use of a party's Brand Features will inure to the benefit of the party holding Intellectual Property Rights in those Brand Features. A party may revoke the other party's right to use its Brand Features pursuant to this Agreement with written notice to the other and a reasonable period to stop the use.

9. Restrictions on Use. Unless Google specifically agrees in writing, Customer will not, and will use commercially reasonable efforts to make sure a third party does not: (a) sell, resell, lease, or the functional equivalent, the Services to a third party (unless expressly authorized in this Agreement); (b) attempt to reverse engineer the Services or any component; (c) attempt to create a substitute or similar service through use of, or access to, the Services; (d) use the Services for High Risk Activities; (e) use the Services to store or transfer any Customer Data that is controlled for export under Export Control Laws; or (f) use the Services on behalf of or for the benefit of any entity or person who is prohibited from using the Services by the laws or regulations of the United States, including parties listed on the SDN List.

10. Publicity. Neither party may make any public statement regarding the relationship contemplated by this Agreement without the other party's prior written consent.

11. Government Purposes. The Services were developed solely at private expense and are commercial computer software and related documentation within the meaning of the applicable civilian and military Federal acquisition regulations and any supplements thereto. If the user of the Services is an agency, department, employee, or other entity of the United States Government, under FAR 12.212 and DFARS 227.7202, the use, duplication, reproduction, release, modification, disclosure, or transfer of the Services, including technical data or manuals, is governed by the terms and conditions contained in this Agreement, which is Google's standard commercial license agreement.

## 12. Representations, Warranties and Disclaimers.

12.1 Representations and Warranties. Each party represents that it has full power and authority to enter into the Agreement. Each party warrants that it will comply with all laws and regulations applicable to its provision, or use, of the Services, as applicable (including applicable security breach notification law). Google warrants that it will provide the Services in accordance with the applicable SLA. Customer represents and warrants that it is a state, city, or federal government entity.

12.2 Disclaimers. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, EXCEPT AS EXPRESSLY PROVIDED FOR HEREIN, NEITHER PARTY MAKES ANY OTHER WARRANTY OF ANY KIND, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR USE AND NONINFRINGEMENT. GOOGLE MAKES NO REPRESENTATIONS ABOUT ANY CONTENT OR INFORMATION MADE ACCESSIBLE BY OR THROUGH THE SERVICES. CUSTOMER ACKNOWLEDGES THAT THE SERVICES ARE NOT A TELEPHONY SERVICE AND THAT THE SERVICES ARE NOT CAPABLE OF PLACING OR RECEIVING ANY CALLS, INCLUDING EMERGENCY SERVICES CALLS, OVER PUBLICLY SWITCHED TELEPHONE NETWORKS.

## 13. Term and Termination.

13.1 Term. The term for the Services will be as decided upon between Reseller and Customer. This Agreement will remain in effect for the Term.

13.2 Termination for Breach. Either party may suspend performance or terminate this Agreement if: (i) the other party is in material breach of the Agreement and fails to cure that breach within thirty days after receipt of written notice; (ii) the other party ceases its business operations or becomes subject to insolvency proceedings and the proceedings are not dismissed within ninety days; or (iii) the other party is in material breach of this Agreement more than two times notwithstanding any cure of such breaches.

- 13.3 **Effects of Termination.** If this Agreement terminates, then: (i) the rights granted by one party to the other will cease immediately (except as set forth in this Section); (ii) Google will provide Customer or Reseller access to, and the ability to export, the Customer Data for a commercially reasonable period of time at Google's then-current rates for the applicable Services; (iii) after a commercially reasonable period of time, Google will delete Customer Data by removing pointers to it on Google's active and replication servers and overwriting it over time; and (iv) upon request each party will promptly use commercially reasonable efforts to return or destroy all other Confidential Information of the other party.

14. **Indemnification.**

- 14.1 **By Customer.** Unless prohibited by applicable law and without waiving sovereign immunity, Customer will indemnify, defend, and hold harmless Google from and against all liabilities, damages, and costs (including settlement costs and reasonable attorneys' fees) arising out of a third party claim: (i) regarding Customer Data or Customer Domain Names; (ii) that Customer Brand Features infringe or misappropriate any patent, copyright, trade secret or trademark of a third party; or (iii) regarding Customer's use of the Services in violation of the Acceptable Use Policy.
- 14.2 **By Google.** Google will indemnify, defend, and hold harmless Customer from and against all liabilities, damages, and costs (including settlement costs and reasonable attorneys' fees) arising out of a third party claim that Google's technology used to provide the Services or any Google Brand Feature infringe or misappropriate any patent, copyright, trade secret or trademark of such third party. Notwithstanding the foregoing, in no event shall Google have any obligations or liability under this Section arising from: (i) use of any Services or Google Brand Features in a modified form or in combination with materials not furnished by Google, and (ii) any content, information or data provided by Customer, End Users or other third parties.
- 14.3 **Possible Infringement.**
- a. **Repair, Replace, or Modify.** If Google reasonably believes the Services infringe a third party's Intellectual Property Rights, then Google will: (a) obtain the right for Customer, at Google's expense, to continue using the Services; (b) provide a non-infringing functionally equivalent replacement; or (c) modify the Services so that they no longer infringe.
- b. **Suspension or Termination.** If Google does not believe the foregoing options are commercially reasonable, then Google may suspend or terminate Customer's use of the impacted Services. If Google terminates the impacted Services, then Google will notify Customer or Reseller, or both.
- 14.4 **General.** The party seeking indemnification will promptly notify the other party of the claim and cooperate with the other party in defending the claim. The indemnifying party has full control and authority over the defense, except that: (a) any settlement requiring the party seeking indemnification to admit liability or to pay any money will require that party's prior written consent, such consent not to be unreasonably withheld or delayed; and (b) the other party may join in the defense with its own counsel at its own expense. THE INDEMNITIES ABOVE ARE A PARTY'S ONLY REMEDY UNDER THIS AGREEMENT FOR VIOLATION BY THE OTHER PARTY OF A THIRD PARTY'S INTELLECTUAL PROPERTY RIGHTS.

15. **Limitation of Liability.**

- 15.1 **Limitation on Indirect Liability.** NEITHER PARTY WILL BE LIABLE UNDER THIS AGREEMENT FOR LOST REVENUES OR INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY, OR PUNITIVE DAMAGES, EVEN IF THE PARTY KNEW OR SHOULD HAVE KNOWN THAT SUCH DAMAGES WERE POSSIBLE AND EVEN IF DIRECT DAMAGES DO NOT SATISFY A REMEDY.
- 15.2 **Limitation on Amount of Liability.** NEITHER PARTY MAY BE HELD LIABLE UNDER THIS AGREEMENT FOR MORE THAN THE AMOUNT PAID BY CUSTOMER TO RESELLER FOR THE SERVICES DURING THE TWELVE MONTHS PRIOR TO THE EVENT GIVING RISE TO LIABILITY.
- 15.3 **Exceptions to Limitations.** These limitations of liability apply to the fullest extent permitted by applicable law but do not apply to breaches of confidentiality obligations, violations of a party's Intellectual Property Rights by the other party, or indemnification obligations.

16. **Miscellaneous.**

- 16.1 **Notices.** Unless specified otherwise herein, (a) all notices must be in writing and addressed to the attention of the other party's legal department and primary point of contact and (b) notice will be deemed given: (i) when verified by written receipt if sent by personal courier, overnight courier, or when received if sent by mail without verification of receipt; or (ii) when verified by automated receipt or electronic logs if sent by facsimile or email.
- 16.2 **Assignment.** Neither party may assign or transfer any part of this Agreement without the written consent of the other party, except to an Affiliate, but only if: (a) the assignee agrees in writing to be bound by the terms of this Agreement; and (b) the assigning party remains liable for obligations incurred under the Agreement prior to the assignment. Any other attempt to transfer or assign is void.
- 16.3 **Change of Control.** Upon a change of control (for example, through a stock purchase or sale, merger, or other form of corporate transaction): (a) the party experiencing the change of control will provide written notice to the other party within

thirty days after the change of control; and (b) the other party may immediately terminate this Agreement any time between the change of control and thirty days after it receives the written notice in subsection (a).

16.4 Force Majeure. Neither party will be liable for inadequate performance to the extent caused by a condition (for example, natural disaster, act of war or terrorism, riot, labor condition, governmental action, and Internet disturbance) that was beyond the party's reasonable control.

16.5 No Waiver. Failure to enforce any provision of this Agreement will not constitute a waiver.

16.6 Severability. If any provision of this Agreement is found unenforceable, the balance of the Agreement will remain in full force and effect.

16.7 No Agency. The parties are independent contractors, and this Agreement does not create an agency, partnership or joint venture.

16.8 No Third-Party Beneficiaries. There are no third-party beneficiaries to this Agreement.

16.9 Equitable Relief. Nothing in this Agreement will limit either party's ability to seek equitable relief.

16.10 Governing Law.

- a. For State and City Government Entities. If Customer is a city or state government entity, then the parties agree to remain silent regarding governing law and venue.
- b. For Federal Government Entities. If Customer is a federal government entity then the following applies: This Agreement will be governed by and interpreted and enforced in accordance with the laws of the United States of America without reference to conflict of laws. Solely to the extent permitted by federal law: (i) the laws of the State of California (excluding California's choice of law rules) will apply in the absence of applicable federal law; and (ii) FOR ANY DISPUTE ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE PARTIES CONSENT TO PERSONAL JURISDICTION IN, AND THE EXCLUSIVE VENUE OF, THE COURTS IN SANTA CLARA COUNTY, CALIFORNIA.
- c. For All other Entities. If Customer is any entity not set forth in Section 16.10(a) or (b) then the following applies: This Agreement is governed by California law, excluding that state's choice of law rules. FOR ANY DISPUTE ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE PARTIES CONSENT TO PERSONAL JURISDICTION IN, AND THE EXCLUSIVE VENUE OF, THE COURTS IN SANTA CLARA COUNTY, CALIFORNIA.

16.11 Amendments. Any amendment must be in writing and expressly state that it is amending this Agreement.

16.12 Survival. The following sections will survive expiration or termination of this Agreement: Section 7, 8.1, 12.3, 13, 14, 15 and 16.

16.13 Entire Agreement. This Agreement, and all documents referenced herein, is the parties' entire agreement relating to its subject and supersedes any prior or contemporaneous agreements on that subject. If Customer is presented with a similar agreement on the same subject matter upon its log in to use the Services, this Agreement supersedes and replaces that agreement. The terms located at a URL and referenced in this Agreement are hereby incorporated by this reference.

16.14 Interpretation of Conflicting Terms. If there is a conflict between the documents that make up this Agreement, the documents will control in the following order: the Agreement, and the terms located at any URL.

16.15 Counterparts. The parties may enter into this Agreement in counterparts, including facsimile, PDF or other electronic copies, which taken together will constitute one instrument.

## 17. Definitions.

"Acceptable Use Policy" means the acceptable use policy for the Services available at [http://www.google.com/a/help/intl/en/admins/use\\_policy.html](http://www.google.com/a/help/intl/en/admins/use_policy.html) or such other URL as Google may provide.

"Admin Account(s)" means the administrative account(s) provided to Customer by Google, or to Reseller by Customer, for the purpose of administering the Services. The use of the Admin Account(s) requires a password, which Google will provide to Customer or Reseller.

"Admin Console" means the online tool provided by Google to Customer for use in reporting and certain other administration functions.

"Administrators" mean the Customer-designated technical personnel who administer the Services to End Users on Customer's behalf.

"Ads" means online advertisements displayed by Google to End Users.

**"Affiliate"** means any entity that directly or indirectly controls, is controlled by, or is under common control with a party.

**"Brand Features"** means the trade names, trademarks, service marks, logos, domain names, and other distinctive brand features of each party, respectively, as secured by such party from time to time.

**"Calendar Data"** means data provided, generated, transmitted or displayed specifically via the Google Calendar application of the Services by Customer or End Users.

**"Confidential Information"** means information disclosed by a party to the other party under this Agreement that is marked as confidential or would normally be considered confidential under the circumstances. Customer Data is Customer's Confidential Information.

**"Contacts Data"** means data provided, generated, transmitted or displayed, specifically via the "Contacts" component of the GMail application of the Services by Customer or End Users.

**"Customer Data"** means data, including email, provided, generated, transmitted or displayed via the Services by Customer, or Reseller on behalf of Customer.

**"Customer Domain Names"** mean the domain names owned or controlled by Customer, which will be used in connection with the Services.

**"Docs Data"** means data provided, generated, transmitted or displayed specifically via the Google Docs application of the Services by Customer or End Users.

**"Domain Service"** means a service provided by Google to Customer purely for Customer's convenience, where Customer may, through a Google-provided interface, register domain names through, or transfer domain names to, Registrar Partners (as defined in the Domain Service Terms).

**"Domain Service Terms"** means the terms at: [http://www.google.com/a/help/intl/en/admins/domain\\_service\\_terms.html](http://www.google.com/a/help/intl/en/admins/domain_service_terms.html), or other such URL as may be provided by Google.

**"Emergency Security Issue"** means either: (a) Customer's use of the Services in violation of the Acceptable Use Policy, which could disrupt: (i) the Services; (ii) other customers' use of the Services; or (iii) the Google network or servers used to provide the Services; or (b) unauthorized third party access to the Services.

**"End Users"** means the individuals Customer permits to use the Services.

**"End User Account"** means a Google-hosted account established by Customer through the Services for an End User.

**"Export Control Laws"** means all applicable export and reexport control laws and regulations, including the Export Administration Regulations ("EAR") maintained by the U.S. Department of Commerce, trade and economic sanctions maintained by the Treasury Department's Office of Foreign Assets Control, and the International Traffic in Arms Regulations ("ITAR") maintained by the Department of State.

**"GMail Data"** means data provided, generated, transmitted or displayed, including email attachments, specifically via the GMail application of the Services by Customer or End Users.

**"Help Center"** means the Google help center accessible at <http://www.google.com/support/> or other such URL as Google may provide.

**"High Risk Activities"** means uses such as the operation of nuclear facilities, air traffic control, or life support systems, where the use or failure of the Services could lead to death, personal injury, or environmental damage.

**"Intellectual Property Rights"** means current and future worldwide rights under patent law, copyright law, trade secret law, trademark law, moral rights law, and other similar rights.

**"Login Data"** means the username and password information entered by Customer End Users in order to use the Services.

**"Notification Email Address"** means the email address designated by Customer to receive email notifications from Google. Customer may provide a Reseller email address for this purpose if it so chooses. Customer may change this email address through the Admin Console.

**"Profile Data"** means data provided, generated, transmitted or displayed, specifically via the Google Profile, including profile pictures and user-provided biographical details.

**"Reseller"** means the Google Apps reseller Customer is paying to provide access to and use of the Services.

**"SDN List"** is the US Treasury Department's List of Specially Designated Nationals.

"Service Pages" mean the web pages displaying the Services to End Users.

"Services" means the Google Apps Core Services provided by Google and used by Customer under this Agreement. The Services are as described here: [http://www.google.com/a/help/intl/en/users/user\\_features.html](http://www.google.com/a/help/intl/en/users/user_features.html), or other such URL as Google may provide.

"Sites Data" means data provided, generated, transmitted or displayed, specifically via the Google Sites application of the Services by Customers or End Users.

"SLA" means the Service Level Agreement located here: [http://www.google.com/apps/intl/en/terms/reseller\\_sla.html](http://www.google.com/apps/intl/en/terms/reseller_sla.html), or such other URL as Google may provide from time to time.

"Suspend" means the immediate disabling of access to the Services, or components of the Services, as applicable, to prevent further use of the Services.

"Term" means the term of the Agreement, which will begin on the Effective Date and continue for as long as Customer is receiving Services from Google, unless terminated earlier pursuant to the Agreement, or pursuant to Customer's agreement with Reseller.

"Third Party Request" means a request from a third party for records relating to an End User's use of the Services. Third Party Requests can be a lawful search warrant, court order, subpoena, other valid legal order, or written consent from the End User permitting the disclosure.

"TSS" means the technical support services provided by Google to the Administrators during the Term pursuant to the TSS Guidelines.

"TSS Guidelines" means Google's technical support services guidelines then in effect for the Services. TSS Guidelines are at the following URL: <http://www.google.com/a/help/intl/en/admins/tssg.html> or such other URL as Google may provide.

"URL Terms" means the Acceptable Use Policy, the SLA and the TSS Guidelines.

IN WITNESS WHEREOF, the parties have executed this Agreement by persons duly authorized as of the date signed by Google below.

Google Inc.

Customer: ENTER CUSTOMER'S FULL LEGAL NAME

By: \_\_\_\_\_  
(Authorized Signature)

By: \_\_\_\_\_  
(Authorized Signature)

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Print Name)

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**Nexic**  
**Statement of Work and Services**  
**for State of Utah**



## **Overview**

State of Utah is looking to Migrate GroupWise archives and historical data to Google Message Discovery.

## **Objective**

Journal State of Utah's GroupWise archives and historical data to Google Message Discovery.

## **Deliverables**

### ***Phase 1: System Wide Planning and Implementation***

- Install Nexic Journaling
- Determine size, centralized location(s) and priority of personal archives to export
- Configure process jobs to connect to personal archives and Google Message Discovery

### ***Phase 2: Rollout***

- Migrate historical and personal archive data to Google Message Discovery
- Initiate various journaling export jobs and monitor and manage exports until completed
- Manage errors and other issues related to corrupted GroupWise personal archives

### ***Projected Timeline***

- 13 weeks to journal 22,650 users or 6.29TB of data to Google Message Discovery
- 70GB data per day or 14 GB data per machine per day (based on 5 machines)

## **Assumptions**

- State of Utah will have the following available prior to the start of the project
  - All necessary products and licensing
  - 5 - Windows 2008 R2 Server s for Journaling server installation
    - 8 GB of RAM
    - Quad core processor minimum
    - 20 GB of free hard drive space for application
    - High speed network connection to centralized location(s) of personal archives
    - High speed network connection to internet
  - All GroupWise personal archives are consolidated and put in a central location(s) where Nexic Journaling can connect to them and journal the data to Google Message Discovery.



- This project will be managed both on-site and remotely, with technical services support from State of Utah
- If VPN access permission is not possible; remote access through WebEx or similar remote support tools will be necessary

Additionally, the following assumptions are being made from the information provided in the State of Utah RFP PR11059.

- Scope of project is to journal GroupWise personal archives and historical data for 22,650 users or approximately 6TB.

### **Technical Project Resources**

The customer is responsible for providing technical points-of-contact that have a working knowledge of the enterprise components to be considered during this engagement.

### **Responsibilities**

Both Customer and Nexic are responsible for the successful execution of this engagement. As such, both parties have been assigned responsibilities as described below:

#### **Nexic Responsibilities**

Nexic shall provide the following:

- Nexic will perform the services as described in the Statement of Work.

#### **Customer Responsibilities**

Customer shall provide the following:

- Appoint and make available a project manager to work with Nexic for the duration of the project. (This person must have authority to act on behalf of the Customer.)
- Furnish Nexic integration Specialist with information and data on Customer's operations, activities, and existing systems, as reasonable required to achieve the project objectives
- Ensure Nexic engineers have necessary security access to networking systems and Customer's facilities during performance of services.
- Ensure adequate workspace and power sources at each facility where services will be performed
- Ensure suitable server platforms, with properly installed and patched network operating system (NOS) software, are available as necessary for each project. (Availability of these resources are critical success factors for the project)

- If necessary, Customer shall be solely responsible to contract for telecommunications facilities (data communications circuit, analog phone lines, wiring etc.), and for the costs associated with such facilities
- Ensure Customer provides for the backup of all computer systems
- Help resolve project issues and escalate issues within your organization, as required
- Customer will be responsible for the support and ongoing maintenance of the operating systems and hardware associated with the installation in this agreement
- Customer will be responsible for the licensing of any software installed by Nexic
- Customer will be responsible for the purchase of all hardware and software required for the completion of this project

## **Personnel Skills and Qualifications**

Nexic will, at its sole discretion, determine the number of personnel and the appropriate skill sets necessary to complete this project. You understand any Nexic resources may be an employee or contractor of Nexic and/or a Nexic Services Provider.

Additionally, the following Customer contacts will need to be fulfilled for this project:

### **Executive Sponsor**

The Customer is responsible for providing an executive sponsor with the ability to obtain the cooperation and acquisition of resources required to successfully complete the engagement.

### **Technical Project Resources**

The customer is responsible for providing technical points-of-contact that have a working knowledge of the enterprise components to be considered during this engagement.

## Nexic Journaling and Google Message Discovery

### Executive Summary

With Google Message Discovery, messages hosted in an external email system, can be sent to and stored in a cloud-based archive at Google. The process of echoing a copy of the message from the email system is often called journaling. Microsoft Exchange has a feature that will journal messages from Exchange to an external SMTP server. Google Message Discovery has been designed to receive messages sent from Exchange journaling.

Novell GroupWise does not have a native journaling feature similar to the feature found in Microsoft Exchange. Yet GroupWise does have very robust programming interfaces to search for and retrieve GroupWise messages and attachments. Nexic Journaling uses low-level native GroupWise programming interfaces to search for messages within GroupWise. It then sends a copy of the message and associated file attachments via the SMTP protocol (using SSL/TLS encryption) to a Google Message Discovery server, similar to how Exchange journals messages.

Nexic Journaling has many features to aid in identifying what messages to retrieve and how to send those messages.

- Archive messages for specific users, groups, entire post offices, domains, or the entire system.
- All message sub-types, or limit to mail, appointment, task, notes, or phone messages.
- Messages to be archived can be limited to specific dates ranges (eg. for historical journaling)
- File attachments can be limited by size, so large log or movie files are not archived.
- All messages in an account can be archived, whether they were sent or retrieved, by internal or external users.
- Once Google has created an account for the customer, the administrators can define and run their own live or historical journaling jobs from their location, without any involvement from Google.

Nexic Journaling is the result of many years of experience in working closely with Novell and GroupWise. Novell has created various different programming interfaces through the years and has added and fixed many features in those interfaces. With each version of GroupWise, new features and new defects are introduced. Our years of expertise in working around these defects, or in taking advantage of the latest technology is readily apparent in the design and architecture of Nexic Journaling.

### Live Journaling

Many message archiving solutions will sit at the internet gateway of a messaging system and capture all incoming or outgoing email traffic. In order to capture internal messages in the message flow, GroupWise would need to expose the internal email traffic. GroupWise does not expose this internal email traffic in a way that makes it easy for capturing and journaling these messages.

To archive internal GroupWise messages, Nexic Journaling connects to the specified GroupWise account, and searches for the messages that meet the desired search conditions. A search condition may be as simple as "all messages", or more likely one such as "all messages since the last time the account was archived."

### Historical Journaling

While most organizations will create Nexic Journaling archiving jobs to journal all new messages on a nightly basis, jobs can be created to journal historical, or older messages to Google Message Discovery. To create a historical journaling job, the same type of job is created, but different search criteria are defined such as "all message between January 1<sup>st</sup> and April 30<sup>th</sup>." This historical journaling job does not affect the other nightly journaling jobs, which can continue to run as defined. Depending on the volume of historical messages to journal, the historical job may be scheduled to run in off peak hours, or broken



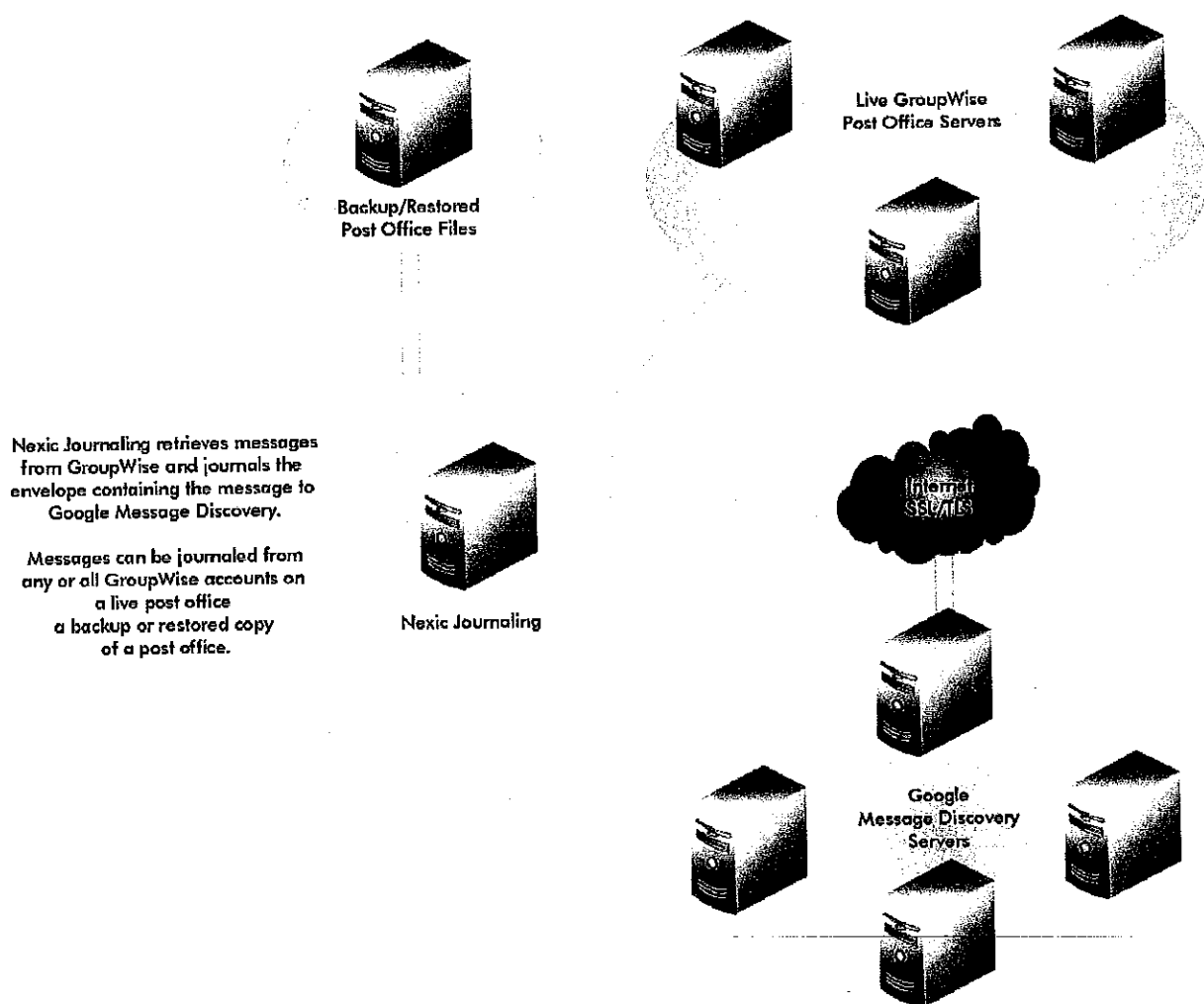
into smaller batches to not impact other network resources.

Another unique aspect of Nexic Journaling is that it can also connect directly to a GroupWise post office database, without having to connect to the GroupWise post office agent service. This means that an older post office on tape, can be restored to an offline directory, and Nexic Journaling can connect to and read the messages in the backup without any other steps - just restore the files and run Nexic Journaling. This makes archiving historical messages from a backup dramatically easier. The following are key elements of historical journaling:

- The original creation date of the message can be preserved as the creation date of the journaled message, so it will reflect in Google Message Discovery as being created on the original date.
- Older messages can be journaled from the live system or directly from a backup copy of the post office database.
- Messages can be journaled from user's personal archives

## How Nexic Journaling Works

Nexic Journaling is set of Windows applications that allow the administrator to configure and manage journaling jobs, as well as components to communicate with GroupWise and Google Message Discovery. Nexic Journaling is delivered as a single setup file. Installation takes less than a minute. Nexic Journaling Console program is used to configure, schedule, start and stop journaling jobs.



## **Output Format**

Nexic Journaling supports multiple output formats including Microsoft Exchange's Envelope Journaling format, the format supported by Google Message Discovery. Nexic Journaling packages the proprietary GroupWise message data into standards-based MIME format. It then sends the MIME message via standards-based SMTP protocol using SSL/TLS encryption, thus enabling Nexic Journaling to send GroupWise messages to Google Message Discovery.

In addition to MIME-defined data such as the creation date, subject, etc., GroupWise specific data, such as Delivered Date, Private flag, Folder, item sub-types like notes and appointments, whether the message was opened, or deleted, etc., can optionally be included as X-Fields in the MIME header, or added to the end of the message body text. This allows GroupWise specific values that are not supported by the MIME standard, to be captured and stored with the MIME message when it is archived.

## **System Requirements**

Nexic Journaling requires a Windows XP/Vista/W7, or 2003/2008/2008R2 PC (32 or 64 bit) to journal messages. It can connect to GroupWise systems hosted on Windows, Linux or NetWare. The computers used for Nexic Journaling could be surplus workstations or high-end, dedicated server PCs. Keep in mind that it does not have to be a Windows Server OS. Nexic Journaling works just as fine on Windows XP or later.

The computer could be a workstation class computer if the volume of daily email and the number of users to process are lower than 50 messages a day received by 100 users or less (5,000 daily volume). This estimate is for a single journaling job. This same workstation class computer could run several journaling jobs staggered throughout the evening, thus one computer can handle several hundred of users receiving or sending about 50 messages a day. A workstation class computer would be a single 2.6 GHz CPU with 1 GB of RAM. Hard disk storage is minimal at less than 30 MB file the installation and less than 500 MB for temporary storage and cache files.

A server class computer would be a minimum of a 2.6 GHz Quad Core CPU with 4GB of RAM or more. These computers could handle a larger volume of email from a larger group of users, such as 100 messages a day for thousands of users (100,000 daily volume). These computers would need to be dedicated to journaling messages. Hard disk storage is minimal at less than 60 MB file the installation and less than 500 MB for temporary storage and cache files.

## **Contact Information**

Nexic Journaling uses a license-based pricing model. A license is purchased once for each account that is to be journaled. Optional annual support and maintenance pricing is also available. A 30-day evaluation version of Nexic Journaling is also available for customers to try Nexic Journaling with Google Message Discovery.

For additional information contact us at: (801) 434-4717 or send an email to [orders@nexic.com](mailto:orders@nexic.com)

**Nexic, Inc.**  
**635 East Technology Ave**  
**Orem, Utah 84097**



Google™

Tony Bianco

---

## PROFILE

Tony Bianco was the CEO/CTO of Salvair and is now the overall CTO of Onix Networking as of July 1, 2010. Tony is a leading authority on Google Apps and Cloud Computing. Having started a Google Apps practice at a leading Google partner over four (4) years ago, Tony has participated in over 100 Google Apps implementations and has led some of Google's biggest and most successful deployments to date. If you look on the web and find video commentaries from organizations like Genentech, DC Government, Avago, JohnsonDiversey, MeadWestvaco and other large organizations it can be tied directly to Tony's involvement as a Project Manager or coordinator for these engagements.

Tony has held positions such as VP of Worldwide Services for Borland Corporation, a \$300M software company, VP of Professional Services for AgilQuest, Managing Director of Services for Appirio, and Sr. Director of Professional Services for webMethods, an EAI company and web-services management company. Tony's technical background (Java development; pre- and post-sales support) and business capabilities provide him with a unique mix of skills to address technical issues and end-user requirements with equal proficiency.

Tony is capable of managing any aspect of a Google Apps roll out, from up front evaluation to technical issues, communications and change management, training and overall project coordination across large multi-functional groups. Tony was an early Google services and applications partner and is well-known and respected within the Google Apps world, both within Google and within the reseller community.

---

## ACADEMIC BACKGROUND

B.S. in Computer Science

Wittenberg University

Springfield, OH

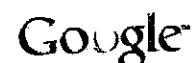
---

## EXPERIENCE SUMMARY

### EXECUTIVE VICE PRESIDENT – WORLDWIDE SERVICES

Over nineteen (19) years of experience, built and managed highly successful/profitable services organizations for leading-edge application software companies such as **webMethods** and **Borland Software**. Increased revenue of software and services, decreased costs, drove up utilization and customer loyalty throughout a world wide organization. Managed and rolled out technologies to support the business. Managed \$36M P&L and staff of 200. Experienced in working with international organizations including Europe, South America, Japan and Asia.

- Built a Services team comprised of Educational Services, Professional Services and Technical Support
- Oversaw the transformation of a point-products consultancy to a solution-oriented, high-value professional services organization
- Moved Americas team from 55 people and \$8M to well over 100 people and \$20M in 15 months
- Turned around U.S. team from -35% margins to +17% margins in 3 quarters
- Successfully moved organizations several times through downsizing and hyper-growth periods
- Helped build a portfolio and execute in three different acquisitions during 18 months
- Spearheaded the development of repeatable packaged solutions
- Expertise in running both geographic model and practice model at software companies



- Built great relationships in sales to drive solution selling

---

## SELECTED ACHIEVEMENTS:

Transformation – Brought on to move a services organization from delivering tactical, point-product sales to delivering on an enterprise solution/vision sold to a customer. During the first year, the focus was in the Americas where we grew the business there from \$8M to \$20M. To execute on this vision we invested in existing employees, partnered with companies who could add value to our solutions and acquired companies to fill gaps in capabilities on the team.

Growth – At webMethods, helped close the first \$1M deal in the U.S. by combining software and services into a solution that was purchased by a major printer company. This was the beginning of the growth run from \$20M to a \$200M company over the next 3 years. At Borland, we grew the services business in every way including headcount, revenue, margins (-35% to +17%) and customer satisfaction over a 15 month period.

P&L Management – Achieved forecasting accuracy of 97% by mid-quarter every quarter. Put systems and processes in place to allow for that predictability. Cut costs where needed to achieve a profitable business. Managed a \$36M worldwide consulting business. Guided organization through acquisitions and downsizing transactions to help manage a responsible business for the company.

IP Development – Created a team focused developing a methodology, tools and templates to help in solution execution. Out of this effort came packaged solutions that were used in implementation and by the marketing teams to create solution messages for the sales teams.

Consultancy Model Expertise – Depending on the product breadth and maturity, different consulting models may apply at product companies. At the last few companies, we have used both the geographic alignment model and the practice model, giving a breadth to running organizations of many different sizes and complexities.

---

## CAREER HISTORY:

### **SALVAIR/ONIX**

Google Apps and Postini reseller and services partner focused on increasing organizational efficiency through cloud computing solutions

### **CEO/CTO**

- Responsible for managing every aspect of technical deployments, staff training and management, P&L, Google relationship, and key customer management
- Successful implementations at large, enterprise-scale customers
- Establish direction of service, training and software product offerings

### **APPIRIO, INC.**

Services and product company in the Software as a Service (SAAS) space focused on accelerating adoption of on-demand software in the enterprise.

### **Managing Director**

- Responsible for identifying customer needs in the CRM space for Salesforce.com and mapping in Appirio solutions through consulting services in order to meet customers' needs.
- Personally responsible for SFA implementations at >\$B public companies
- Worked with sales teams to move company from poor SFA process and technologies to an efficient process and set of technologies



### **AGILQUEST SOFTWARE**

Software company developing enterprise workplace management systems to help companies manage real estate more effectively.

#### **Vice President of Worldwide Services**

- Responsible for the P&L of the entire education, consulting and technical support businesses.
- Managed international customer base, including large firms like KPMG, E&Y, Deloitte, HP and Motorola in Europe, APAC, Canada and the U.S.
- Focused on putting infrastructure in place to run the business including business plans, collaboration processes, metrics and reporting tools.
- Responsible for, and drove license renewals at our largest customers.
- Managed the sales pipeline for services engagements.

### **BORLAND SOFTWARE**

\$300M software company developing enterprise solutions to help companies produce reliable software repeatedly.

#### **Vice President of Professional Services**

- Responsible for the P&L of the entire consulting and education services business, which amounted to approximately a \$36M business.
- Managed internationally, including groups in Japan, Europe, APAC, Brazil, Canada and four districts in the U.S. comprised of Directors, Managers and Consultants.
- Turned around a failing business (-35% net margin) to a profitable one (17% profit) in 3 quarters.
- Managed teams through 2 restructurings and kept voluntary attrition rates below 15%.
- Kept Customer Satisfaction rates above 80% every quarter.
- Created and directed the overhaul of the business transformation including production of new service offerings, expanded employee development programs and many new business-visibility operational processes.
- Helped drive software license revenue through very structured approaches to Proof of Concept opportunities.
- Managed the sales pipeline for services engagements.
- 200 people across the world wide organization including subs.

### **WEBMETHODS, INC.**

\$200M integration software company

#### **Senior Director of Professional Services North America**

- Responsible for the P&L of the entire U.S. as it related to Professional Services, which amounted to approximately a \$32M business.
- Managed four districts each with Directors, Managers and Consultants.
- Generated approximately \$3M in profit during the past year.
- Created and directed the strategic plans related to partners and new products / service offerings.
- Created the Organizational Success Plan to drive more top and bottom line for the corporation.
- Hit all Major Business Objectives (Financials, Utilization, Production Events and Customer Satisfaction).

#### **Senior Director of Professional Services East Region**

- Responsible for the P&L of the entire eastern half of the U.S. as it related to Professional Services, which amounted to approximately a \$25M business.
- Managed three sub-regional managers/directors and helped them run and grow their businesses.





- Did performance reviews, mentoring, salary adjustments, career development and skills enhancements of the East management team.
- Developed business strategies and aligned the organization to meet those goals through sales campaigns, organizational realignments and the hiring of new employees.
- Managed the team through two different force reductions.
- Was responsible for over 400 customers, 2 sales people, 3 managers, 1 operational employee, 50 consultants and 1 account manager.
- Over a one-year period, I grew it from 80% of quota to 130% of quota even though the number of webMethods consultants reduced during that time period.
- Achieved all-time high customer satisfaction survey results of over 8.81 on a scale of 10 for over 50 customers per quarter.
- Helped create, define and implement the Preferred Deployment Partner Program, which generated an additional 40 consultants and \$6M in annual revenue to our organization.

#### **Director of Professional Services Midwest**

- Responsible for a team of 12 consultants in the Midwest.
- Did performance reviews, mentoring, salary adjustments, career development and skills enhancements.
- Developed operational reports to manage the business and communicate the team goals up and down the organizational structure.
- Managed the budget for the Midwest team including a P&L of approximately \$5M.
- Maintained management responsibility for delivery of projects at over 100 customers on several hundred unique projects.
- Managed relationships and developed presentations for customers anywhere from C-level to project managers

#### **Platform Business Unit North American Director of Systems Engineering**

North Central Director of Systems Engineering



Google

Tom Cooper

---

## PROFILE

Tom Cooper was the Principal and Founder of Salvair and is now the COO for Google Apps for Onix Networking as of July 1, 2010. Tom has been in software sales and sales management for twenty-seven (27) years, beginning with an IBM Mainframe and plug-compatible software company in January, 1984.

Tom has held positions such as VP of Sales for a services consultancy in Columbus, OH, and General Manager for webMethods, and Director of Sales for Sterling Commerce. Tom has led efforts to train sales teams across North America and has held positions in mainframe, mid-range, client-server and web-based technology companies over the course of his career. Tom started Salvair to provide quality software and services in the Google Apps market, as many first-stage implementers and Google partners were unaccustomed to dealing with, and managing, large-scale worldwide project implementations on an enterprise scale.

Tom manages customer interactions, projects, end-user training, technical projects and most phases of a Google Apps roll out, and can interface easily with technical and non-technical users in any organization.

---

## ACADEMIC BACKGROUND

B.A. in Psychology

Kenyon College

Gambier, OH

---

## EXPERIENCE SUMMARY

**Salvair LLC**

**- Powell, OH**

### Principal and Founder

Salvair is focused on reselling Google Apps Premier Edition, Postini GMD and GMS, and Message Encryption licenses, and providing software and services to organizations to migrate them to Google Apps from current platforms, and to enhance their user experience.

- Invited to participate in Google's first Partner Advisory Board for key Google Apps resellers
- Completed key customer engagements with highest customer ratings
- Focus on enterprise-level implementations (3,000+ users)

**webMethods**

**- Fairfax, VA and Columbus, OH**

### General Manager

Responsible for software sales, field marketing, field SI alliances and professional services revenue for North Region "franchise" of webMethods, including Central and Eastern Canada, New England, NY Financial and Great Lakes area.

- Won "Chairman's Award" for 2004 as employee with outstanding contribution to company
- Only employee in company to qualify for every President's Club (6 years)
- Took over management of lowest performing region in Q4, 2004 and was #1 region in performance for Q4 at 131% of quota



### **Director of Sales**

Responsible for the daily management of 7 Regional Sales Managers in a 6 state region (OH, IN, KY, WV, MI, W. PA). Tasked with delivering timely, accurate forecasts, training new hires, managing high-level account contacts, and generating revenue for region; \$12-16 million quota assignment over the two years of managing the region.

- Won Region of the Year award for 2002-2003
- Won Director of the Year award for 2002-2003; #1 in quota achievement in dollars and percentage points
- Only Director in company to qualify for President's Quota Club
- Closed largest percentage of business at new accounts, and largest percentage with existing customers
- Qualified for Quota Club in 3 years as Director of region

### **Regional Sales Manager**

Handle the OH, MI, KY, IN, and midwest region in sales. Manage the entire sales process from cold calling to contract closure for webMethods' B2B Integration Server (XML, real-time), webMethods Mainframe Integration Server, and webMethods Enterprise Server (EAI).

- Closed largest domestic deal in company history in Q4, FY1999
- Closed \$1m of revenue in Q1, FY2000 on quota of \$400,000
- #1 (of 75) RSMs for FY 2001 in software revenue at 310% of quota, generating \$9 million+ in revenue on quota of \$3,050,000. #2 overall RSM of software and services combined
- Finished FY 2000 at 152% of quota
- Reached FY 2001 yearly quota of \$3.05m in 4 months, 4/00-8/00
- Reached Quota Club Achievement in first 2 years offered by company

## **Actra Business Systems/Netscape**

**- Sunnyvale, CA**

### **Channel Support Manager**

Responsible for supporting Netscape field sales representatives in their efforts to sell the Actra/Netscape CommerceXpert product line for secure buying and selling over the Internet. Developed and gave presentations for high level executives and middle level technical personnel. Discussed all aspects of MRO procurement and Web-based selling models with prospects, including OBI, EDIINT/IETF, AICPA, ERP integration, EDI and "structured messaging" requirements, forms, business rules, workflow, order management and other issues.

## **Sterling Software/Sterling Commerce**

**- Columbus, OH**

### **US Director of Mainframe Sales**

**Aug. 1993 - Sept. 1994**

Responsible for recruiting, hiring, training and management of nine mainframe Account Executives and an administrative assistant. Managed administrative, contractual, technical and sales issues and negotiated final sales closure on specific deals.

- Grew mainframe revenue over 40% from the prior year

### **Director of Sales**

**Oct. 1994 - April 1997**

Managed sales people selling all client-server, AS/400, PC and mainframe software as we transitioned from computer platform focus to solution selling.

- Grew Western Region sales by over 50% from the prior year and finished at 131% of assigned revenue plan
- Grew Eastern Region sales by over 55% from the prior year and finished at 130% of assigned revenue plan.



Participated in and led product direction and development from a sales perspective, revamped our contracts process and implemented a uniform contracts guide book, and participated in work groups for strategic fiscal year planning, compensation, marketing and finance and administration. Participated in the development of the Sterling compensation plan in use for the last 5 years within the organization.

## **Goal Systems/Legent Corporation**

**- Columbus, OH**

### **District Manager**

Responsible for management of four to six account managers and an administrative person. Responsible for recruiting, hiring, training, and managing account managers in both VSE/MVS environments. Managed administrative, contractual, technical and sales issues, and negotiated final sales closure with clients over an eight state area.

- Promoted first within Goal Systems when the position of District Manager was created
- Hired account managers who eventually led the national sales force in first year sales
- Achieved President's Club award three out of four years as a District Manager
- Generated two of the largest deals in Goal Systems history in December, 1988, with transactions at Sears and Systematics, Inc.
- Generated corporate revenues in excess of \$10 million in District Manager position
- Designed and helped implement new online sales systems for easier sales support and more comprehensive management reporting
- Selected as only sales department representative to evaluate and ultimately generate new pricing policies and CPU reclassification for entire sales/marketing organization

### **Account Manager**

Responsible for telephone and direct sales to IBM PCM sites.

- Achieved President's Club award three out of four years - missing only my rookie year
- Acted as technical product trainer to sales force based on my in-depth product knowledge
- Achieved Education Sales Person of the Year in 1985, top sales of training/education courses
- Won monthly sales awards more often than any account manager, resulting in yearly achievement award

### **Administrative Support**

- Designed and implemented Goal's first corporate mailroom and distribution center
- Completed one year of classes by Goal technical support and development personnel before being offered Account Manager position



Google

Grant McCarthy

---

## PROFILE

Grant McCarthy is a Senior Consultant with Onix Networking, and has been with Onix Networking since April 2009.

Grant is highly skilled in Google Apps, having implemented Google Apps for a number of Onix's clients. He is knowledgeable in many key areas of Google Apps, and has extensive experience in all areas of the Google Apps deployment process. He has developed a number of custom applications for the Google Apps environment, using Java, JavaScript, XML and Google Apps Script. He is also actively involved in Postini set up and configuration, user provisioning, and training, among other things.

Grant has participated in many Google Apps implementations and has extensive experience helping customers get over the toughest hurdles in the migration process from source to Google Apps.

---

## ACADEMIC BACKGROUND

B Commerce (Accounting)	University of the Witwatersrand	Johannesburg, South Africa
-------------------------	---------------------------------	----------------------------

---

## EXPERIENCE SUMMARY

### Senior Consultant, Onix Networking.

*Westlake, OH*

- Pre and post-sales technical support of Google Apps.
- Setting up Google Apps environments from pilot phase to full deployment (including Google Message Security and Google Message Discovery.)
- Development of applications that simplify various administrative tasks in Google Apps using Java, JavaScript and XML.
- Providing training and documentation to customers.
- Maintaining good relationships with the customers.

### Lead Application Systems Developer, KeyCorp.

*Cleveland, OH*

- Converted large, slow Lotus Domino application into a faster web-based application utilizing J2EE, JavaBeans, JavaServer Faces, and Hibernate. Project was delivered on time and within budget.
- One of twelve candidates chosen company-wide to undergo four months of comprehensive training in latest object-oriented methodologies and Java technologies.
- Developed numerous Lotus Domino applications that automated a wide variety of manual tasks for various clients, freeing up people's time allowing them to work on more important functions.
- Refactored existing Domino applications to make them run more efficiently, while increasing its stability. Lowered the number of support calls for these applications to virtually zero.
- Supported existing Domino applications ensuring that they were running error-free.
- Developed Lotus Notes agents that extracted data from DB2 and Oracle data sources for use in management reports.

**Senior IT Specialist, IBM.***Johannesburg, South Africa*

- Technical Pre-Sales Lead for Lotus and IBM Workplace Products. Set up pilot demonstrations at customers. Presented at product launches and user groups. Solved technical issues. Educated end-users. Assisted with completion of tenders and technical documentation.
- Team leader for the Intel server team responsible for IBM Global Services largest account.
- Domino Mail Administrator for the City of Johannesburg, South Africa's largest customer at IBM Global Services, ensuring trouble-free message delivery to 10 000 mailboxes.
- Developed Domino applications to automate administrative tasks and generate reports for management.
- Wrote the IBM Redbook – Using LDAP for Directory Integration in Raleigh, NC, making use of IBM Tivoli Directory Integrator.
- Developed web interfaces for technicians to access the necessary incident information from the call center application, using Active Server Pages (ASP.)
- Wrote the IBM Redbook - Lotus Domino Designer 6: A Developer's Handbook in Boston, MA.
- Project Manager and Team Leader for the Online Procedures Manual, responsible for placing IBM Global Services' and the customers' processes and procedures onto a Domino Web Server.
- Designed and developed the Online Procedures Manual using Lotus Notes/Domino, HTML and JavaScript.
- Trained company personnel with regard to the use of the Online Procedures Manual database.
- Traveled overseas on an IBM partnership program to Connecticut. Spent 3 months with the IBM Advanced Internet Technologies Team. Developed a Content Management system using JavaScript, DHTML, and XML/XSLT technologies.

---

**SKILLS PROFILE**

- JavaScript
- LDAP
- Java EE
- Enterprise JavaBeans (EJB)
- JavaServer Faces (JSF)
- JavaServer Pages (JSP)
- Hibernate
- SQL
- XML/XSL/DTD
- HTML/DHTML
- Lotus Domino Administration
- Lotus Application Development using LotusScript and Formula language

---

**GOOGLE APPS REFERENCES**

1. **Mr Derrick Ruetter**  
(905) 319-5300  
derrickr@pintys.com
2. **Mr Todd Schmitz**  
(586) 469-5122  
todd.schmitz@macombgov.org



Google™

**Steve Holly**

---

## **PROFILE**

Steve Holly is a Consultant with Onix Networking and has been with Onix for 7 years.

Steve is highly skilled in Google Apps, having implemented Google for dozens of Onix Networking Google Apps customers. Steve is knowledgeable in many key areas of Google Apps implementations, and works extensively with LDAP integration, mobility solutions, mail migration from Exchange/Outlook, Postini set up and configuration, user provisioning, and training, among other things.

Steve has participated in many Google Apps implementations and has extensive experience helping customers get over the toughest hurdles in the migration process from source to Google Apps.

---

## **ACADEMIC BACKGROUND**

Honorable Discharge      U.S.Navy, 6 years of service      Data Processing Technician E-5

---

## **EXPERIENCE SUMMARY**

**Onix Networking**  
*Sales Engineer/Apps Consultant*

**Westlake, OH**  
*Jan 2003 – Present*

- Provide pre- & post-sales technical support (on-site and remote) to account managers and customers for Google Enterprise (Apps, Search, Geo), Juniper and Blue Coat products and solutions.
- Provided deployment services & support for over 20,000 Google Apps accounts
- Completed Juniper J-Series technical certification achieving JNCIA-J certification
- Completed Google Apps deployment training
- Support Google Federal sales organization as a technical resource when Google's SEs are unavailable or busy
- Primary technical resource supporting the development and deployment of Business.gov, an award winning web site developed by the Small Business Administration. Provided support and guidance on Google Search, Google Maps and Google Apps to prime contractor responsible for the project.

**WorldCom**  
*Corporate Account Manager*

**Cleveland, OH**  
*Jan 2001 - Oct 2002*

- Responsible for managing and growing an account base of \$20 million in revenue per year covering several industries including banking, manufacturing, health care and retail.
- Managed account teams responsible for each account to ensure the customer was receiving quality service and support from installation to billing to ticket management.
- Achieved 179% growth in account base for 2001



Google

- Re-signed large manufacturing & government customer to a new remote access contract, resulting in \$1 million of guaranteed new revenue and extending the relationship for an additional year.

**UUNet (a WorldCom Company)**  
*Global Design Engineer*

**Cleveland, OH**  
*Jan 1996 - Jan 2001*

- Created a custom dial-in solution for a large manufacturing company that allowed them to provide services from multiple vendors through one simple user interface that UUNet provided. The user interface allowed the company to easily migrate to a complete UUNet solution, with no impact to the end-users. This saved the manufacturing company time by simplifying the migration process and increased our local branch revenue by \$1.8 million per year.
- Developed a VPN seminar for Cleveland area customers which was used as the model for WorldCom's VPN Road Show. The Road Show visited 15 cities in the US and resulted in \$5 million of new revenue in the first year of the program's existence
- Installed and supported remote access and Internet solutions for customers. The solutions were based on Microsoft, Cisco, Checkpoint, Nortel, Sun Solaris and numerous other platforms.
- Responsible for understanding the customers' technical and business requirements for remote access and Internet solutions and then developing solutions based on those requirements. Worked closely with different groups within UUNet to help move a project to completion.
- Provided support to customers both in person as well as over the phone. Diagnosed problems remotely and responded accordingly.
- Completed MCSE 4.0, CheckPoint 4.0 Security Engineer and Administrator, SecurityDynamics ACE/Server Engineer and Citrix WinFrame 1.6 Certified Administrator certifications.

**OmniComp Systems, Incorporated**  
*System Integrator*

**Cleveland, OH**  
*March 1994 - Jan 1996*

- Developed a relationship with the Cleveland CompuServe sales branch and integrated OmniComp's Citrix WinView offering with CompuServe's global network to create custom remote access solutions for CompuServe customers. This partnership resulted in a new product offering from CompuServe and \$50,000 in new revenue for OmniComp.
- Installed and supported Novell networks and Citrix WinView remote control servers. Helped Citrix develop a white paper describing the process to ensure PeopleSoft will work on their WinView remote control product.
- Managed British Petroleum's Human Resource Novell based network. The network was comprised of 140 workstations, 10 laser printers, 2 Novell servers and 4 Citrix WinView servers.

**Navy Regional Data Automation Center**  
*Navy Data Processing Technician 2nd Class*

**Alameda, CA U.S.**  
*March 1992 - Feb 1994*

- Designed, installed and managed Novell networks for local military installations.
- Installed wiring for network deployments. This included Shielded Twisted-Pair for Token-Ring, Twisted-Pair, fiber and Thick-net installations.





- Responsible for the installation, maintenance and repair of computer systems and printers for 17 military organizations in the San Francisco area. These systems included laptops, desktop systems, laser jet printers and network services.

## **SKILLS PROFILE**

- 20+ years of department leadership experience in the IT field
- 10+ years of internet security experience in large IT environments
- 10+ years experience managing Internet routers and firewalls
- Extensive project management and team leadership experience
- Expert-level knowledge of Windows networking environment, Active Directory, and Group Policy
- 4+ years as a Juniper Certified Internet Associate (JNCIA): Firewall/VPN, Intrusion Detection & Prevention; Routing; SSL VPN; Access Control
- 2+ years as a Blue Coat Certified Proxy Professional (BCCPP)



Google

Richie Foreman

---

## PROFILE

Richie is a Senior Consultant with Onix Networking, and has been with Onix Networking since October 2010.

Richie is highly skilled in Google Apps, having not only implemented Google Apps, but also managing a Google Apps domain in his prior position. He is extremely knowledgeable in many key areas of Google Apps, and has extensive experience in all areas of the Google Apps deployment process. He has developed a number of custom applications for the Google Apps environment, using PHP, Python, Javascript, and XML. He is also actively involved in Postini set up and configuration, user provisioning, and training, among other things.

---

## ACADEMIC BACKGROUND

Computer Information Systems Program

DeVry University

Phoenix, AZ

---

## SELECTED ACHIEVEMENTS

- Extensive knowledge of Google Apps for Enterprise services
  - Day to day management and support of 7,000 employee accounts on Google Apps for Education
  - Developed Web-Based User Administration Console for Google Apps Services
    - Web-Based GUI for OpenLDAP
    - Management of Users, Groups, Queries, Suspensions, and Deletions
    - User Creation, Password Changes and Suspension/Enabling supplemented with Google Data API calls
  - Developed SAML2 Identity Provider
    - Provides SSL secured authentication
    - Password changes supplemented with Google Data API calls
  - Developed video tutorials and training materials in response to specific end-user questions
    - Link: <http://connect.mpsaz.org/help> (Help resource page)
    - Link: <http://connect.mpsaz.org/help/sync> (Mobile device tutorials)
    - Link: <http://connect.mpsaz.org/help/sync/bbvideo/video/1947> (Blackberry video tutorial)
  - Migrated over 250GB of email data in 7,000 email accounts to Google Apps, overnight
  - Extensive knowledge of Linux, Google Data APIs, Active Directory, OpenLDAP, DNS, Mail Headers, and SMTP
  - Assisted in writing and evaluating offers for Collaboration and Communications Suites
- 

## EXPERIENCE SUMMARY

### Senior Consultant, Onix Networking

Westlake, OH

- Pre and post-sales technical support of Google Apps
- Setting up Google Apps environments from pilot phase to full deployment (including Google Message Security and Google Message Discovery)
- Development of custom for use in the Google Apps PHP, Python, Javascript, and XML
- Providing training and documentation to customers
- Maintaining good relationships with the customers



## **Supervisor Web Programmer, Mesa Public Schools**

*Mesa, Arizona*

- Administrated Google Apps for Education Services for 7,000 users spread out over 86 schools and 3 administrative complexes
  - OpenLDAP Management
  - Google Apps Email Security
  - Google Apps Directory Sync
  - Google Apps Directory Sync for Email Security
  - Developed Web-Based User Administration Console
  - Developed Custom SAML2 Identity Provider
  - Utilize Postini Messaging Archive to perform administrative investigations
  - End-user support and creation of video training materials
  - Worked with Google and Onix Networking to troubleshoot administrative and end-user technical issues
- Developed MADS (Mesa Active Directory Sync) in C#/.NET4 to provision user accounts in Active Directory from the district's Student Information System
- Trained for MCTS Exam 70-640 (Windows 2008 Active Directory Configuration)
- Designed, Developed and provided end-user support and training to custom web applications written in PHP/MySQL
- Developed Architeck, a web-based content management system currently servicing over 250,000 individual school and teacher webpages
- Administrated several Linux/Apache/MySQL/PHP (LAMP) Debian Linux servers
- Contributed 3rd Party Modules to Moodle.Org, an Open Source Course Management System
- Developed custom software utilizing Action Script 3 and Flash Media Server for the Award-Winning MPS Space Integration Module project
  - Article: <http://www.takepart.com/news/2010/05/13/teacher-lands-pbs-award-for-innovative-space-program>
  - Video: <http://www.pbs.org/teachers/innovators/gallery/entries/177/>

## **SKILLS PROFILE**

---

PHP5  
MySQL  
Linux  
C#/.NET4  
Active Directory  
OpenLDAP  
Regular Expressions  
Google Apps Directory Sync: Setup, LDAP  
Queries

jQuery Javascript Framework  
Smarty Templating Engine  
XML Xpath  
Action Script 3, Flex 4, Flash Media Server  
Android SDK  
Google Data APIs  
Python  
Google App Engine



Google

Greg Heier

---

## PROFILE

Greg Heier is a Consultant with Onix Networking Corp. Greg is highly skilled in Google Apps, having implemented Google Apps at his former company prior to joining Salvair/Onix. Greg is knowledgeable in many key areas of Google Apps implementations, and works extensively with LDAP integration, mobility solutions, mail migration from Lotus Notes and Exchange/Outlook, Postini set up and configuration, user provisioning, and training, among other things.

Greg has participated in many Google Apps implementations and has extensive experience helping customers get over the toughest hurdles in the migration process from source to Google Apps.

---

## ACADEMIC BACKGROUND

B.S. in International Business History

The Ohio State University

Columbus, OH

---

## EXPERIENCE SUMMARY

### Salvair, LLC.

*Columbus, OH*

- Project consultant to clients during Google Apps implementations
- Provide direct technical support for clients by addressing questions specific to their project, and managing various aspect of customer implementations

### ASIST Translation Services, Inc.

*Columbus, OH*

- Oversaw IT Department including personnel management, project cost analysis, and purchase orders
- Project lead on company-wide implementation and maintenance of Google Apps
- Delivered corporate presentations to prospective clients and conducted staff training seminars on company technologies and protocols
- Administered Windows Server 2003 and Windows Server 2008 for 40+ users
- Utilized Active Directory to manage users, security groups, email addresses, and distribution groups
- Configured Exchange Server 2003 for mail delivery and spam filtering
- Designed company's Internet security including firewall configuration, Group Policy, customized logon scripts, and Enterprise-level anti-virus systems
- Implemented automated software deployment to client machines using Group Policy
- Supported desktop users using Windows XP, Windows Vista, Windows 7, and Mac OS X
- Led long-term IT projects, directing communication between internationally located team members
- Developed customized website solutions using PHP, Javascript, CSS, and HTML
- Created and maintained MySQL databases as website back-end solutions
- Developed online marketing strategy utilizing Internet search engines and website rankings
- Implemented multi-layer data backup procedures including Symantec Backup Exec tape backups, SSH transfers for offsite backups, and Windows ShadowCopy
- Installed and maintained servers with RAID 1 and RAID 5 configurations
- Constructed security protocols for Remote Desktop access

### Technology Service Leader, City Year, Inc.

*Columbus, OH*

- Led Columbus location IT Department as part of a multi-site 1000+ user organization



- Constructed intranet website organizing electronic documents for Columbus staff
- Participated in community service projects including literacy tutoring for children, park building, and city construction initiatives

**Systems Administrator, AOL, LLC.**

*Columbus, OH*

- Served as a team leader for large security upgrade projects
- Directed programmers, database administrators, and service representatives in cross-department projects
- Managed time and resources of team-oriented tasks to meet specific project deadlines
- Upgraded user password databases and Kerberos authentication servers
- Remotely applied hotfix patches to Windows Server machines

**Network Engineer, FlexNET Automation Resources, Inc.**

*Columbus, OH*

- Installed new network hardware and PCs at client locations
- Provided clients technical support through telephone and email

**SKILLS PROFILE**

- Cisco Certified Network Associate (CCNA)
- 7+ years of department leadership experience in the IT field
- Extensive project management and team leadership experience
- 8+ years experience administering Windows Server products (2000/2003/2008)
- Expert-level knowledge of Windows networking environment, Active Directory, and Group Policy
- 7+ years experience as a corporate IT trainer of IT professionals, management, and all company employees
- 10+ years experience managing Internet routers and firewalls
- Corporate development experience in PHP, MySQL, Javascript, CSS, HTML, C++, and C#



**Derrick Anderson**

## PROFILE

Derrick Anderson is a Consultant with Onix Networking. Derrick is highly skilled in key areas of Google Apps implementations, and is a go-to person for LDAP integration, Single Sign-On support, mobility solutions, mail migration from Lotus Notes and Exchange/Outlook, Postini set up and configuration, and user provisioning, among other things.

Derrick has participated in many Google Apps implementations and has extensive experience helping customers get over the toughest hurdles in the migration process from source to Google Apps.

## ACADEMIC BACKGROUND AND CERTIFICATIONS

*** Scripting Languages ***	
• Python	• Active Pearl

*** CERTIFICATION ***	
• A+ Certification	• Security+ Certification
• Microsoft Certified Professional (MCP)	• VMware Certified Professional (VCP)

*** SPECIAL TRAINING COURSES ***
• Microsoft 2008 Server and Network Training Course
• Certified Dell Storage Training Course
• McAfee Intrusion Detection and Security Risk Management (SRM) Training
• VMware ESX 3.5 and Virtual Center 2.5 Training (Configure, Deploy, and Manage)
• VMware ESX vSphere 4.0 and Private Cloud Virtualization Training (Configure, Deploy, and Manage)
• Google Apps (SaaS) Premier Systems Integrator Training (Google's Headquarters in Mountain View, CA)
• Postini Cloud Message Security and Encryption Training (Google's Headquarters in Mountain View, CA)

## EXPERIENCE SUMMARY

*** PROFESSIONAL EXPERTISE ***
• Systems Architectural & Design • System Integration & Solutions • Consultative Sales • Sales Support • Team Training •
• Project Management • System Development & Execution • Skilled Problem Solver

*** CAREER HISTORY ***
------------------------

*** Onix Networking Corp. (Google Partner) Atlanta, Georgia ***
Dates: 12/2008 to Present - Position: Sr. Consultant

*** BRIEF VIEW OF KEY PROJECT ACCOMPLISHMENTS ***
---

**Richline Diamond Group:**

- Consolidated three different locations with independent Microsoft Exchange Servers (2K, 2003, and 2007) running Active Directory domains. Federated all locations and 3500+ mailboxes into a single instance of Google Apps Premier account.
- Configured dual-delivery mail routing, Migrated 2500+ mailboxes, Replicated Active directory, and Auto provisioning.
- Deployed Postini's Cloud Message Security for spam filtering, virus blocking, TLS encryption, and 10 year data retention.

**University of Alabama:**

- Assisted in migrating 58,000+ student accounts from an on-premise Unix mail servers to Google Apps Education Edition.
- Collected Unix user accounts using softerra LDAP browser, Provision Google Apps Student accounts and SSO solution.

**Chapel Hill-Carrboro City Schools:**

- First Class Data Migration, Google Apps Domain Configuration, Google Apps Mail Routing, Postini Message Security Integration, MX Record Settings, DNS SPF Entries, and Google Apps/Postini Administrator Console Training.

**Nexteer:**

- Migrated Exchange users, Configured Active Directory, Setup Google Apps Directory Sync, Imported Shared Contacts List, Postini's Cloud Message Security, Mail Archiving, TLS Domain Encrypting, and Onsite Training.

<b>*** RESPONSIBILITIES ***</b>
---------------------------------

- Serve as a Consultant to corporations, educational institutions, and small businesses migrating to Google Apps cloud solutions.
- Perform in-depth system analysis review of potential client's network infrastructure and organizational needs for an accurate statement of work (SOW) proposal.
- Responsible for projects in different stages of deployment, review project target dates, and outline next phase of migration.
- Set up and configure virtual data centers on Amazon's Web Service or VMware Virtualization. Simulate different network environments for projects which provides a cost cutting solution for mock deployments and application development.
- Transition Exchange 2000/2003/2007 (64bit), Lotus Notes 6.5/7.x/8.x, FirstClass and other mail services to Google Apps SaaS.
- Deployed Single-Sign-on (SSO) solutions using Sun OpenSSO for Google Apps Premier logins as a cost-cutting option.
- Activate new Postini Message Security consoles to configure domain policies, client's inbound/outbound mail gateways, Server Encryption, Spam Filtering, Content Management, Virus Blocking, Dual/Split Delivery, and Archiving Policies.
- Provide post-deployment support for new Google Apps administrators by troubleshooting user issues, suggesting best practices, knowledge transfer, help with python scripts, and resolving difficult mail configuration issues.
- Troubleshoot client's data migration connection issues such as firewall rules, Active Directory credentials, mailbox corruption and other items.
- Proficiently use LDAP browsers to user profile information, extract data, and retrieving Active Directory attributes.

<b>*** SPELMAN COLLEGE - Atlanta, Georgia ***</b>
---

<b>Dates:</b> 03/2001 to 12/2008 - <b>Position:</b> Sr. Windows System \ Security Engineer
--



*** RESPONSIBILITIES ***
--------------------------

- Served as Sr. Systems Engineer, responsible for daily data center activities with Windows, Linux, and Vmware ESX 3.5.
- Designed and configured a high availability environment. Some of the active services are Active Directory, SQL Databases, VMware, Google Apps SaaS, Postini Cloud Solutions, Cisco Network Defense, Clustering, DNS, and Blackberry Service.
- Managed Active Directory group policies, domain permissions, wireless authentication and Window logon scripts.
- Implemented and configured Windows 2003/2008 Active Directory student domain, migrated all student accounts, set student permissions, group policies, segmented student network resources, and created a one-way trust relationship.
- Utilized Microsoft SCCM management tool for windows updates, software deployments, and desktop/server inventory.
- Troubleshoot Linux server issues (Bash Shell), used VI editor, managed Linux user accounts, and updated patches.
- Troubleshoot issues such as mail routing, , database corruptions, dual-delivery, mailbox permissions and delivery failures for Lotus Notes and Exchange 2003 (Test Migration Group).
- Project lead on infrastructure design and implementation of VMware ESX 3.5 and Virtual Center 2.5.
- Vast knowledge of virtualization, VMotion, Clustering, DRS, server hardware/updates, iSCSI targets, and P2V images.
- Managed campus backup solution with Veritas Backup Exec. 12.0 utilizing tape libraries, NAS, SAN, and online storage for data retention, backups, and restores.
- Co-managed Dell NAS/SAN storage for capacity planning, disk allocation, replication, and load balancing.
- Created Cisco Clean Access (CCA) patch management policies to identify students computer vulnerabilities before accessing network resources. Also, Created Cisco Security Agent (CSA) rules, and modules to detection/prevention (i.e buffer overflow attacks, blocks spyware, sniffer traces, application analysis, track suspicious behavior patterns).
- Utilized McAfee ePolicy orchestrator 4.x for host intrusion protection (HIP)\Internet Security for Desktop/Server Security.
- Installed GFI network appliances to control bandwidth, analyze traffic, monitor security events, and network scans.
- Implemented projects such as a resource on LDAP browsing integration, migrating Windows servers 2K3 to 2K8 server, Cisco IDS/IPS Security, Storage Management, Disaster Recovery Policies and Procedures.
- Provided network resources such as internet access, wireless authentication, Google Apps support, virus updates, ghost imaging, network shares, user profiles for 15+ labs, 900+ computers, and 2600+ students across campus.





## PROFILE

Adel is a Project Manager with Onix Networking, and has been with Onix Networking since October 2010.

Adel's vast experience includes training, courseware development, project and change management for several industries and business sectors implementing Google Apps. He demonstrates excellent technical knowledge and the ability to communicate Google Apps technology effectively to audiences ranging from front line employees to C-level executives. Adel has extensive expertise in translating business objectives into successful Google App implementations and process flow.

---

## SELECTED ACHIEVEMENTS

### Accomplishments as a **Manager**:

- Managed a team of programmers, improving financial system efficiencies and programming skills.
- Achieved 80% plus instructor utilization mix between full-time, part-time and contractors to arrive at 96% of plan.
- Recruited and hired new trainers, increasing the delivery resource pool by 10%.
- Prioritized, delegated, and reviewed work assignments within pre-determined deadlines.
- Improved payroll, bonuses and expense report processes, resulted in timely and efficient cash disbursements.
- Analyzed, instituted and improved communication procedures with clients and instructors, effectively improving customer satisfaction and instructor effectiveness by 30%.
- Proprietor of a retail business.
- Maintained inventory and cost controls by initiating periodic reporting processes.
- Improved sales margins by 3% over a 1½-year period, by implementing marketing incentives and improving customer service.

### Accomplishments as a **Project Manager**:

- Managed complex training rollouts in major public and private industries including several law firms, hospitals and a major municipal public school system, totaling over 150,000 users.
- Managed courseware development for e-learning and instructor-led-training for POS, ERP and other systems.
- Developed and implemented a skill assessment program to cost-effectively trained 10,000 end-users.
- Managed and maintained a comprehensive training budget, achieved 3% budget surplus.
- Developed policies and procedures for the implementation of several training program rollouts.
- Selected by IBM to manage training rollouts for educational, healthcare and retail clients.
- Managed, developed and implemented instructional design projects for fortune 500 companies.
- Managed, developed and implemented training programs for several different industries.

### Accomplishments as a **Consultant**:

- Partnered with sales staff as a technical expert, resulting in increased sales volume and return business.
- Consulted with business owners/operators on the use of financial principals and computer technology improving gross margins by 2%.
- Consulted with management on file management, software and hardware recommendations.
- Consulted with management on process flow and system improvements.



- Consulted, trained and supported law firms' proprietary applications and word processing needs.
- Designed Instructional aides for proprietary retailer software.
- Trained end-users on standard, proprietary and technical software applications improving job efficiencies for fortune 500 companies.
- Developed, coordinated and delivered Train-the-Trainer instruction.
- Designed, created, maintained and supported several Access databases.
- Trained software and proprietary applications for Latin American markets in Spanish.
- Translated training documentation from English to Spanish and vice versus.
- Developed courseware for ILT and WBT; including time management, POS, ERP and inventory systems.
- Narrated instructional video introducing Microsoft Office products and proprietary software; providing training to remote users.

#### Accomplishments as a **Programmer**:

- Identified, analyzed, debugged and resolved system problems on all production jobs.
- Programmed and maintained VB, Dbase, COBOL and FOCUS reporting systems.
- Used EASYTRIEVE and FOCUS to develop a real estate tax payment and accrual system.
- Developed an on-line reporting system using FOCUS for monitoring Clamshell Grills implementation.
- Supported and developed a reinvestment reporting system using EASYTRIEVE for proper and timely allocation of reinvestment dollars for individual restaurants.

#### Accomplishments as a **Financial System Analyst**:

- Prepared and instructed financial workshops to in-house users improving job performance.
- Consulted with Latin American controllers on GAAP and general business practices.
- Analyzed monthly operating results and financial position to identify potential exposures and opportunities for improvement.

---

## EXPERIENCE SUMMARY

Onix Networking Corp., Westlake, Ohio  
Wildman, Harrold, Allen & Dixon LLP, Chicago, Illinois  
Quadtec Solutions, Inc., Chicago, Illinois  
Act 1 Technical Services (an IBM Contract House), Chicago, Illinois  
PerfectAccessSpeer, (a Kaplan Company), Chicago, Illinois  
Catapult – (an IBM wholly Subsidiary), Chicago, Illinois  
United States Internal Revenue Service, Chicago, Illinois

---

## ACADEMIC BACKGROUND

Bachelor of Science, University of Illinois -- Champaign-Urbana  
Major: Accounting, Double Minor: Managerial Information Systems and Spanish  
Microsoft Certified Professional (MCP)  
Microsoft Office Specialist (MOS)  
Bi-lingual in Spanish

1986



---

## PROFILE

Dave is a Project Manager with Onix Networking, and has been with Onix Networking since August 2010.

Dave's experience includes program & project management, training, change management for several industries and business sectors implementing Google Apps. Dave leads large deployment engagements and is responsible for integrating communication, technical, and training workflows into a cohesive project plan. Dave is a Prosci-Certified Change Management consultant and leads communication and project management activities for Onix client engagements, including helping clients to develop a comprehensive communication plan for an effective migration to Google Apps. Dave has trained C-level executives on Google Apps and has conducted numerous end-user and administrative assistant training sessions for new Google Apps users.

---

## SELECTED ACHIEVEMENTS

- In 2008/9 converted a \$25,000 per year client into a major client with an escalating 5-year agreement worth \$400,000+ per year
- In 2007, sold over \$3.2 million in software and services, including a 4-year, \$2.6M software contract plus over \$200,000 in services to a large professional services firm
- Built two-person consulting office to over twenty consulting professionals serving major DoD IT program
- Managed operations for business with \$18M annual budget, overseeing a staff of nine professionals
- Managed 25+ accounts including McKinsey & Company, Agilent Technologies, Lockheed Martin, KPMG, CGI, SAIC, Johnson & Johnson, and MetLife

---

## ACADEMIC BACKGROUND

- M.S. in Management Information Systems, McIntire School of Commerce, University of Virginia, 2001
- M.B.A., Averett College, 1991
- B.S. Electrical Engineering, Rose-Hulman Institute of Technology, 1983
- Corporate training, including project management, organizational development, consulting, corporate real estate management, sales, public presentations and training delivery

---

## EXPERIENCE SUMMARY

### *Onix Networking, Inc* **Project Manager**

**2010-2011**

Lead Google Apps deployment engagements to ensure effective change management and customer satisfaction during email/calendar conversions affecting 100% of client IT users.

- Managed six successful deployments handling scope negotiation, change orders, communications, website tailoring and deployment, customer satisfaction surveys, and training on GMail, calendar, chat, contacts, documents, and sites
- Forged strong relationships with clients implementing Google Apps and with Google representatives who work on these engagements

- Developed 25 communications examples for reuse among all Onix customers, generating additional revenue and increasing clients' change management effectiveness

***AgilQuest Corporation Senior Account Manager***

**2000-2010**

Led account managers who sell and deliver software services and ensure customer satisfaction through quality service delivery, prompt response to product issues, and clearly documented expectations.

- Oversaw 25+ accounts for major companies and firms such as Navigant, Deloitte, CACI, Barclays Global Investors, Lockheed Martin, CGI, Grant Thornton, and McKinsey & Company
- As Director of Account Management, increased professional services revenue by 36% in 2005; by 15% in 2004
- Obtained international experience with customers in the U.K., Russia, Poland, Germany, Canada, Indonesia, Singapore, and the Philippines; willing to travel internationally to expand business
- Provide consultation and technical training on both web-based and client-server systems

***WARREN COUNTY SCHOOLS Assistant Superintendent for Finance and Accountability***

**1998-2000**

Managed a \$32 million annual budget, purchasing and procurement, payroll, loss control, compensation and benefits, and accounting functions for a school system with eight schools and six ancillary facilities. Manage investments for a self-insurance fund with over \$1.4 million in assets.

- Reengineered budget processes and realigned budget, eliminating costs for non value-adding activities and increasing funds applied toward instruction by 4% (\$1.25 million)
- Forecasted an increase in health care costs, increased aggregate stop loss insurance, saving \$160,000 in one year
- Automated the budget development and execution process providing timely and accurate projections to managers
- Evaluated proposals for financial management software, document imaging systems, and outsourced services

***FREDERICKSBURG CITY PUBLIC SCHOOLS Assistant Superintendent for Finance***

**1996-1998**

Supervised nine professionals (and indirectly supervised 32) to manage financial operations, information technology, risk management, facilities operations and maintenance, and employee benefits and compensation functions for an \$18 million organization.

- Implemented local area networks in each school; evaluated proposals for WAN connectivity
- Developed software tools to automate several financial and management processes which had previously been performed manually; increased productivity, allowing the organization to meet increasing demands without an increased budget
- Obtained \$400,000 in grant funding and negotiated with a local college to provide technology training for teachers
- Ensured satisfactory completion of work by a contractor that had ceased work and had installed substandard materials

***KING GEORGE COUNTY PUBLIC SCHOOLS Director of Business & Finance***

**1993 - 1996**

Supervised payroll, purchasing/procurement, accounts payable, and accounting functions for a school division with a \$16 million annual budget.

- Instituted a corporate culture of financial accountability in a school division that had recently overspent its budget; obtained the organization's first audit report in which there were no reportable conditions
- Selected by Virginia Department of Education to present a seminar on School Financial Management
- Developed and negotiated contracts with the architect and builder of a \$9 million student elementary school
- Coordinated legal, technical, financial, and contractual activities to meet a short deadline to avoid arbitrage penalties of over \$40,000 on a \$5,000,000 construction loan

***KPMG CONSULTING Consultant, Senior Consultant, Manager***

**1987 - 1993**

Led consulting projects involving information technology change implementation, project management, and process improvement for programs with annual budgets ranging from \$3 million to \$200 million.

Responsibilities included profit and loss, contract negotiation and control, supervision, and staff development.

- Evaluated, recommended, and implemented a project management tool for the Aegis Weapon System project, a major Department of Defense software development effort (over 1 million lines of code)
- Implemented financial and schedule performance software systems for various clients
- Developed and presented management training programs addressing supervisory and management skills, TQM/CQI, business process reengineering, and software project management to over 200 executives and managers
- Brought in over \$700,000 in business while remaining 96% chargeable to clients
- KPMG Quality Service Award recipient

***U.S. ARMY PC Team Leader, Automation Branch***

**1985 - 1987**

Managed efforts to procure and maintain equipment/software and to train and support users. Led a team of computer support professionals in presenting courses and providing technical support to over 250 computer users. Collaborated with other managers to optimize productivity through information technology.

***U.S. ARMY Communications-Electronics Engineer, Material Development***

**1983 - 1985**

Project officer responsible for ensuring user requirements were met by developmental, tactical radios.

Developed specifications, operational and organizational plans, training plans, and testing plans. Presented technical briefings to high-ranking military officers and foreign officials.



## PROFILE

A solution-oriented information technology professional with progressive experience in a variety of systems and applications with a focus on Enterprise Search. Solution delivery from requirements to implementation and support is a key strength that is backed by strong analytical, communication and interpersonal skills. Able to provide solid solutions using a proactive approach to documentation and delivery as well as leading a team of developers. Major strengths include:

Enterprise Search Technologies

Google Search Appliance

XML, XSLT

Apache, Tomcat

Java, JSP, Servlets

HTML, CSS, Javascript

Solution Delivery

Web Site Analytics

System and Business Analysis

I have a strong foundation of knowledge with the Google Search appliance that includes knowledge and experience with: Crawling, Databases, Feeds, Authentication, Architecture, Filtering, Unification, Mirroring, Administration, Troubleshooting and Connectors.

---

## PROFESSIONAL EXPERIENCE

**Onix Networking Corporation**, Westlake, Ohio

2009 - Present

A leading provider of world-class IT services by partnering with industry leaders such as Google, Alcatel, NetScreen and Juniper.

**Senior Systems Engineer** (2009 – Present)

Established the Google Search Professional Services team by bringing my extensive knowledge of the Google Search Appliance, Google Apps and other Enterprise Search technologies to the Onix team.

- Worked with a number of customers to assess their Google Search architecture and implementation methodologies and provide professional guidance on changes to enhance the value of their systems.
- Expertise includes:
  - Environmental assessments and recommendations
  - Architectural strategies
  - Search optimization and Content Authoring strategies
  - Documentation and Implementation of changes
  - Training and guidance
- Provided support for a number of customers to help them to resolve technical issues with their search appliances. Worked with Google Support and the customer to provide enhanced support experiences.
- Designed and implemented proof-of-concept trials.
- Documented and tested new features of the search appliance as released by Google.



**Symantec Corporation**, Toronto, Ontario

A \$6 billion company that secures and protects business and users from an ever-growing set of complicated and dangerous threats in today's connected world.



1994 - 2009

### **Principal Application Analyst (2005–2009)**

Guided and strengthened the Symantec.com web site by leading a team of globally dispersed developers. Implemented new technologies, increased the efficiency of the web site and streamlined the publishing processes.

- Developed a brand new search solution, using the Google Search Appliance, to improve web site search effectiveness from 65% to 90%, increased derivative sales substantially and reduced support costs all in parallel.
- Implemented collections, search results pages and index rules to facilitate country/language specific searching for approximately 50 regional sites.
- Guided multiple teams to build self-sufficient targeted searches using meta-tags added to content, leading to zero maintenance from the development team.
- Influenced the implementation of two additional Google search solutions in the organization.
- Conceptualized and demonstrated a method of supporting an identical search results page that would support all languages and countries with one code base.
- Identified content reorganization strategies to support optimal search results for various business units.

### **Application Analyst (1999–2005)**

Member of a skilled team of in-house developers working with an external vendor to re-architect the Symantec web site and bring it up-to-date with current technologies and best practices.

- Launched a new search solution, using Java servlet technology, utilizing Verity K2 to enable parametric filtering of site content and to control search results rankings.

---

## **EDUCATION**

Bachelor of Science (Honours), Trent University - 1994

### **PROFESSIONAL DEVELOPMENT**

Google Advanced Partner Training  
SOX Processes and Change Control Procedures  
Developing with XML, Web Services and XSLT  
Google Search, Verity K2 Search  
TIBCO BusinessWorks Designer  
Java, Lotus Notes, LotusScript

### **SERVICE AWARDS**

Symantec STAR (1999)  
IT Team (2004, 2005)  
IT Excellence (2006)  
Symantec A++ [7 awarded] (1998 – 2006)  
Symantec Applause [4 awarded] (2008-2009)







Project Phase / Task	Owner	Onix Hours Allocated	Hours Spent	Hours to Complete	Early Adopters		User Testing		Mock Deployment		General Rollout		Go-Live														
					Prep	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11		Wk 12	Wk 13	Wk 14	Wk 15	Wk 16	Wk 17	Wk 18	Wk 19	Wk 20	Wk 21	Wk 22	Wk 23	Wk 24	Wk 25
Upload Training Materials to Support Site	Onix	4																									
Create/Revise Training Materials with Policies	Onix/Utah	16																									
End User Train-the-Trainer Webinars (2)	Onix	9																									
Sub-Team Training Meetings	Onix	12																									
Go-Live for Early Adopters Wave 1																											
Project Management																											
Weekly Meetings and Deliver Weekly Status Report	Onix	28																									
Gather hours feedback, adjust Project Plan if needed	Onix/Utah	12																									
Release resources as needed	Onix/Utah	1																									
Gather technical issues feedback, relay to training/comm teams	Onix/Utah	4																									
Review/clean up all sections of Project Team Site	Onix	4																									
Update Risk Plan based on Early Adopters user experience	Onix/Utah	4																									
Technical																											
SSO Guidance/Consulting	Onix	14																									
Business Systems Integration consulting	Onix	3																									
Technical Sub-Team meetings	Onix	8																									
Communications																											
Build Welcome Package/Message	Onix/Utah	81																									
Leadership Announcements	Onix/Utah	8																									
Gather Feedback on Communications	Onix/Utah	6																									
Gather Feedback on Training	Onix/Utah	9																									
Ask the Expert Calls for Early Adopters Wave Users	Onix	13																									
EA Communications	Onix/Utah	8																									
Create/Revise Comm. Materials	Onix/Utah	15																									
Gather General Google Apps Feedback	Onix	8																									
Communications Sub-team Meetings	Onix	8																									
Training																											
GAPS Admin Workshop (1)	Onix	14																									
GMD/GMS Admin Workshop (1)	Onix	2																									
Training Sub-Team Meetings	Onix	4																									
Go-Live for Mock Deployment																											
Project Management																											
Weekly Meetings and Deliver Weekly Status Report	Onix	28																									
Gather technical issues feedback, relay to training/comm teams	Onix	15																									
Update Risk Plan based on Early Adopter user experience	Onix/Utah	8																									
Technical																											
Google BES User Activation/Testing - Mock Deployment	Utah/Onix	26																									
Run Test Data Migrations - Mock Deployment	Utah/Onix	6																									
Data migration of Early Adopter users	Utah/Onix	4																									
Change Production MX Records	Utah																										
Technical Sub-Team meetings	Onix	16																									
Communications																											
Leadership Announcement #1	Utah	55																									
Gather Feedback on Communications	Utah																										
Ask the Expert Calls for Mock Deployment	Onix/Utah	15																									
Create/Revise Comm. Materials	Onix/Utah	20																									
Pass Out ID/pwd to users	Utah																										
Gather General Google Apps Feedback	Onix	4																									
Message from the CIO	Utah																										
Leadership Announcement #2	Utah																										
Direct Comm. To Users	Utah																										
Communications Sub-Team Meetings	Onix	16																									
Training																											
End User Train-the-Trainer On sites (2)	Onix	99																									
End User Train-the-Trainer Webinars (2)	Onix	8																									
Executive 1:1 (10)	Onix	20																									
Executive Asst. Train-the-Trainer (2)	Onix	4																									
Help Desk Workshop Train-the-Trainer (1)	Onix	3																									
Early Adopter End User Webinars (10)	Onix	40																									
Training Sub-Team Meetings	Onix	15																									
Go-Live for Global Go-Live																											
Project Management																											
Weekly Meetings and Deliver Weekly Status Report	Onix	15																									
Project Close Meeting	Onix/Utah	8																									
Peripherals		94																									

Project/Phase/ Task	Owner	Only Hours Allocated	Hours Spent	Hours to Complete	Early Adopters	User Testing	Prep	Mock Deployment	General Rollout	Go-Live
Project Phase/ Task	Owner	Only Hours Allocated	Hours Spent	Hours to Complete	Prop	Wk	Wk	Wk	Wk	Wk
Run Test Data Migrations - General Rollout	Utah/Onix	8			Wk 1	Wk 2	Wk 3	Wk 4	5	
Data migration of General Rollout Wave users	Utah	6								
Google BES User Activation/Testing - General Rollout	Utah/Onix	80								
Level two Helpdesk and incident support	Onix	0								
Communications										
Direct Comm. To Users	Utah									
Pass Out ID/pwd to users	Utah									
Training		55								
Train Go Live End Users	Utah									
Train Go Live Execs	Utah									
Train Go Live EAs	Utah									
Go-Live Support (On-Sites for a few locations)	Onix/Utah	55								

**Tasks that are listed in the "Detailed" tab are organized in the following way:**

First by       Project Phase  
Then by       Workflow  
Then by       Week the task should begin

**When adding new tasks, please follow these organization rules.**